TEMPUS

version

2

the editor

for the Atari ST

Tempus 2 is a quality product from

Tempus 2

The Editor for your Atari ST

System Requirements:
Atari ST Computer with a mouse and a disk drive

Program Copyright © CCD 1987 - 89
English translation of manual Copyright © HiSoft 1989

Tempus Version 2, May 1989

Printing History:
1st Edition May 1989 (ISBN 0 948517 17 4)

Set using an Apple Macintosh™ with Microsoft Word™ & Aldus Pagemaker™

ISBN 0 948517 17 4

All Rights Reserved Worldwide. No part of this publication may be reproduced or transmitted in any form or by any means, including photocopying and recording, without the written permission of the copyright holder. Such written permission must also be obtained before any part of this publication is stored in a retrieval system of any nature.

It is an infringement of the copyright pertaining to **Tempus 2** and its associated documentation to copy, by any means whatsoever, any part of **Tempus 2** for any reason other than for the purposes of making a security back-up copy of the object code as detailed within this manual.

Table of Contents

Chapter 1 Welcome to Tempus 2 1

Introduction 1
What you need to use Tempus 1
Computer 1
Disk Drives 1
Monitor 2
Making a Backup 2
Support 2
General Information about Tempus 3
Running Tempus 5
The Files on the Disk 5
Conventions 6
Command Style 7
Concepts 7
Current Text 7
Filenames 8
Directories 8
Dialog Boxes 8
Internal Errors 9
Basic Parameters 9
Tempus' Memory Management 9
Not Enough Memory 9
Reclaiming Memory 10
The Keyboard 10
Key Combinations 10
Priority 11

Chapter 2 Text Entry 13

The Different Text Entry Modes 13
- Switching Between Modes 13
- Left and Full Justification 14
- Notes About Word Wrap 14
- Insert 15
- Auto Indent 16
- Auto Scroll Mode 16
- Maximum Line Length 17

Notes About Text Entry 17
- Disappearing Mouse 17
- Entering Special Characters 17

Editing Commands 19
- Horizontal Block Movement 23
- Cursor Positioning 23
- Cursor Positioning Modes 24
- Cursor Commands 25
- Using the Mouse 28

Bookmarks 28
- Bookmark Commands 28

Other Quick Access Methods 29

Chapter 3 File Commands 33

The File Selector 33
- The Pathname 34
- Selecting Files 34
- The Search Mask 34
- Directories 34
- Drives 35
- File Information 35
- Read Directory 35
- Changing the Search Masks 35
- Drive Information 36
- Installable File Selection Parameters 36
- Keyboard Shortcuts 37

Loading Files 38
Load File 39
Insert Text 39
Saving Files 40
Save with Backup 40
Save without Backup 40
Save As 40
Deleting Files 41

Chapter 4 Block Commands 43

Defining a Block 43
Setting Block Markers 43
Missing Block Definition 44
The Block Commands 44
Copy Block without Markers 44
Delete Block Markers 45
Complement Block Markers 46

Chapter 5 General Commands 47

Search and Replace 47
Search 47
Search Again 49
Search and Replace 49
Generating Cross-Reference 51
Setting the parameters 51
Sorting 53
Converting Characters 54
Comparing Files 56
Removing Unnecessary Characters 56
Converting Text to Wrap Mode 57
Reformatting Text Areas 57
Reformat 57
Reformat Paragraph 58
Clearing Text 58

Undo 58
Line Editing 59
Clearing Text 59
Structure 60
The RPN 60
What is RPN? 60
The Keys on the Calculator 62
Tab 63
Expand Text 63
Compress Text 64
Character Size 64
Fonts 65
Using System Font 65
Inverse Fonts 65
Tempus Information 66

Chapter 6 The Mouse Buttons 67

The Left Mouse Button 67
General Window Commands 67
Scroll Bar 68
Icon Commands 69
The Right Mouse Button 70
Window Commands in the Current Window 70
End of Block 70
Window Commands in any Window 71
Pressing both Mouse Buttons 71

Chapter 7 Text Windows 73

Using Text Windows via the Keyboard 73
Bringing Text Windows to the Front 73
Close Text Window 74
Zooming Windows 74
Window Tiling and Stacking 75
Stacking Windows 75
Tile Windows Horizontally 75
Tile Windows Vertically 76
Installing Window Sizes and Positions 76

Chapter 8 Starting and Quitting Tempus 77

Starting Tempus from Other Programs **77**
Starting Other Programs from Tempus **78**
Start Program After Quitting 78
Immediate Program Launch 79
Quit **79**
Quit and Verify 79
Quit and Save 80

Chapter 9 Settings and Parameters 83

Settings **83**
Setting Line Length 83
Setting Page Length 83
Set Paging Factor 84
Set Tab Width 85
Enable/Disable Time Display 85
Enable-Disable Grow/Shrink Boxes 85
Setting Tempus' Parameters **86**
Memory Requirements 86
End Of Line Marker 87
Full Justification 87
Digit Type 87
Screen Saving 88
Auto Saving 88
Scroll Bar Lag 88
Changing the Keyboard Layout **89**
Keyboard Layout 89
Macros **89**
Macro Recording 90
Executing 91
Macro Definition Example 91
Function Keys **92**

Chapter 10 Changing the Settings 95

The Different Types of Settings 95
System, Keyboard & Printer Settings 98
Source Format 98
Compiling 99
Error Messages 99
Keyboard Settings 100
System Settings 102
Printer Settings 102
Keywords 103
Print Commands 103
Print Text 104
Print Block 104
Printing to Disk 104
Aborting Printing 104
Line Numbering 105

Chapter 11 Tempus' Data Structures 107

Internal ASCII Codes 107
File Format 107
Changed Vectors 108
Blitter 108
Other processors - 68020 108

Appendix A The Keyboard 109

Keyboard Shortcuts 109
Key Numbers 113

Appendix B The ST ASCII Table 115

Appendix C Technical Support 117

Upgrades and Suggestions 117

Chapter 1
Welcome to Tempus 2

Introduction

Thank you for purchasing Tempus 2, one of the most advanced and versatile editors available for the Atari ST.

This manual is designed to help you get the most out of the program and we urge you to familiarise yourself with the manual before undertaking too much work with Tempus. At the very least, you *must* read the next three sections on **What you need...** and **Making a Backup** before attempting even to use Tempus.

Please also make sure that you return your registration card to HiSoft so that you can obtain technical support and upgrade details.

First things first ...

What you need to use Tempus

Computer

You can use Tempus with any Atari ST that has TOS in ROM. Tempus will generally adapt itself to the amount of memory available in your ST. There are certain configurable options within Tempus that affect the way the editor uses memory; these are detailed later.

Disk Drives

You can use a single- or a double-sided floppy drive or a hard disk with Tempus. Tempus is shipped on a single-sided floppy disk, so that you can easily make a backup of the original disk.

Monitor

Aside from an ST and a disk of some kind, you will have either a colour or a monochrome monitor. If you are using a monochrome monitor, there is nothing special that you have to be aware of to use Tempus.

If you are using a colour monitor you must make sure that your ST is set up for medium resolution when using Tempus. Medium resolution can be set using Set Preferences... on the Options menu of the Desktop. Tempus does not work in low resolution.

Using the Control Panel Desk Accessory you can alter the screen colours of your ST to suit your needs.

Note: Remember that simply changing resolution will not alter the DESKTOP.INF file. To make sure that your resolution is saved for the next time you need Tempus on your ST, use the Save Desktop option under the Options menu on the Desktop. If you want to use medium resolution only for Tempus, save the DESKTOP.INF file only onto your Tempus working disk.

Making a Backup

You have several ways of making a backup of Tempus. You can use the disk copying function of the Desktop to duplicate the disk, or you can just copy the TEMPUS.PRG file to whichever disk/directory you want. However you do it, *please make a back-up!*

Support

We are continually striving to make this product better, so we are very receptive to suggestions about how Tempus could be made more useful to you. If enough people ask for the same types of features, the likelihood is high that such features will be implemented in a future release of Tempus. We are also currently developing a powerful word processing system based on the editing technology in Tempus.

To take advantage of the support we offer, even if only to receive the newest major revision of the program, you must have sent us your registration card. You will then automatically be sent any new information about Tempus. You must also quote your serial number for technical support, you may find it useful to make a note of it here:

Serial No.

See **Appendix C** for more details of Technical Support.

General Information about Tempus

Some of the most important features of Tempus are its high editing speed and the many easily accessible editing commands. The following is a list of some of the main features of Tempus:

- Tempus is written entirely in 68000 assembler for speed
- Tempus is only 70k in size
- Works with monochrome and colour monitors
- In monochrome mode there is a choice of 8x8 or 8x16 fonts
- Special character sets can be loaded for use while editing
- Tempus uses GEM to its fullest extent; where GEM is too slow new routines emulate and extend the GEM calls
- Up to four files can be edited concurrently
- Size of files is limited only by available memory
- Lines can be up to 255 characters long
- Optional word-wrap
- Optional justification of text in word-wrap mode
- Definition of macros as well as configurable keyboard layout
- Definition of up to 20 function keys
- Extended editing commands
  - Deletion of parts of lines
  - Movement/switching of lines
  - Duplication of lines
  - Upper- to lower-case conversion and vice-versa
- Customised file selector with 10 selectable and redefinable pathnames, with active drives selectable by a click on a button plus the ability to display additional information about a given file, such as the file's name, size and date and time of its last modification

- Powerful but easy-to-use search and replace functions
- 20 separate, saveable search and replace strings, with wildcards
- Cross reference generation
- Checks for balanced structure
- Sort of lines
- Comparison of two files
- Deletion of unnecessary characters like spaces, tabs etc. at the ends of lines
- Text conversion: uppercase to lower and vice versa
- Built-in RPN calculator with hex, decimal, octal and binary modes. Results can be pasted into your text
- Programmable printer driver
- Full range of editing functions
- Three selectable cursor modes
- Auto-Scroll mode to make tedious entry of long listings easier
- Access to all 256 characters in the ST's character set
- Configurable screen saver
- Automatic save with configurable delay
- Optional time display
- Almost all user-configurable functions can be saved separately in groups (the configurations are saved in the .PRG file). Some of the groups are:
  - Basic parameters such as line length
  - Printer driver info
  - Size and position of text windows
  - Character sets
  - Keyboard layout
  - File selection parameters
  - Layout of the function keys
- Other programs can be launched with an optional command line from within Tempus or when quitting Tempus
- All of Tempus' functions can be accessed from the keyboard
- Access to most fields within dialog boxes from the keyboard
- Some functions accessible from icons as well
- Support for the Blitter

- Block functions:
  - Selection of a block with the mouse
  - Copying text without having to move block markers
  - Horizontal movement of block markers (helpful when formatting source)
- Extended status display: Insert/Overwrite mode, Caps Lock etc.
- Mouse pointer disappears automatically during keyboard entry
- Undoable UNDO
- Line numbers can be printed
- Delete file command
- Configurable memory usage
- Grow and shrink boxes can be disabled
- Configurable delay before screen starts scrolling

Running Tempus

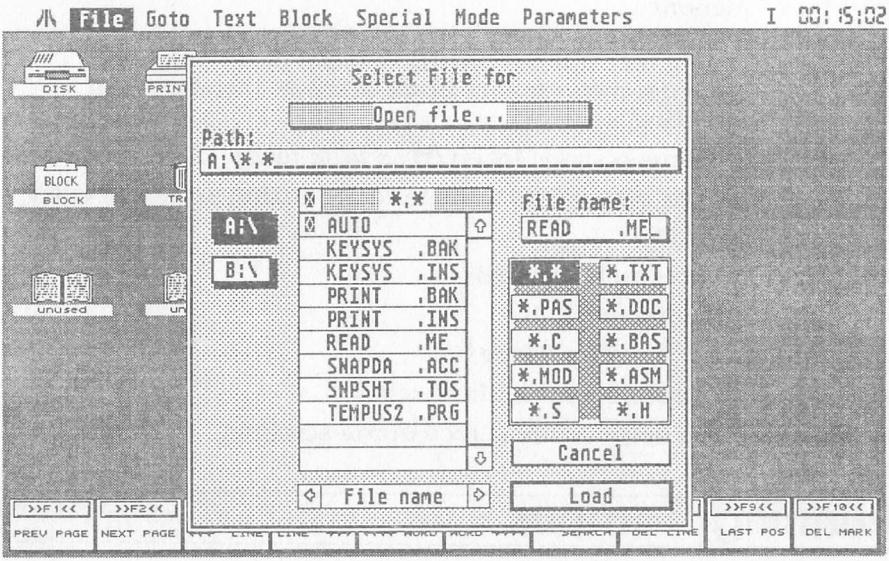
Take the backup of your original Tempus disk and put it in drive A:. Double-click on the icon for drive A: to open a window which shows the contents of the disk.

The Files on the Disk

Your backup disk should contain the following files:

TEMPUS2.PRG	this is the editor.
READ.ME	this file contains the latest information about the version of Tempus supplied and any additions to the manual.
DESKTOP.INF	this file will only be on the disk if you have used Save Desktop, a function available in the Options menu.
PRINT.INS	this contains the initial values of the Printer Settings.
KEYSYS.INS	this file contains the initial values of the Keyboard and System Settings.

To run Tempus, double-click on TEMPUS2.PRG. When Tempus has finished loading, the following screen will appear.



Tempus' Opening Screen

You may have noticed in reading through the description above that Tempus is a very complex piece of software. It is advisable that you read as much of the documentation as possible so that you can get the most use out of the program.

Conventions in the Manual

We hope that we have designed and set this manual in a way that is easy-to-use. So that you can get the maximum use out of it we will explain some of the conventions used:

The manual is divided up into a series of Chapters, each one explaining and detailing a particular set of features that are logically connected. Within each Chapter various commands are discussed and then the method of obtaining each command is given, with a sidebar so that it is easily seen. Characters that appear on the screen or are typed in from the keyboard generally are shown in the Avant-Garde font to distinguish them from the normal text. Example:

Expand Text

With this command, Tempus will replace any tab characters within the file with the number of space characters equivalent to the current tab length (see **Chapter 9** for details on how to set the tab length).

Expand Text (i_value = 16478)

- select Expand in the Special menu
- use the keyboard shortcut Control-- (Control and the minus key)

The command is **Expand Text**; this is followed by a description and then the method by which you apply the command, marked with a sidebar. Each command can be accessed through the menus or via a keyboard shortcut or both. You can change the keyboard shortcut for each command and to do this you need to know the command's unique **i_value** (**i**nstallation **value**) - this is given after each command and can also be inspected in the KEYSYS.INS file. Details of how to install new keyboard shortcuts are given in **Chapter 10**.

Concepts

The following concepts are used throughout this manual:

Current Text/File and Current Window

Most of the commands that you can execute will be performed on the *current text* or *current file*. This is the text file whose window is active, i.e. uppermost on screen. The window that contains the current text is called the *current window*. We will often use the words *text* and *file* interchangeably.

The line which contains the cursor is referred to as the *current line*. The concepts of the beginning of a line and the end of a line are hopefully self-explanatory.

Filenames

A file name is made up of a maximum of 8 characters for the name and 3 characters for the file's extension. The name and extension contained in a file name are separated by a period.

For example: FILENAME.EXT

Directories

Directories can be divided up into the root directory and sub-directories. The root directory of drive C: is displayed as C:\. A sub-directory nested two levels deep would be displayed as C:\ONE\TWO\.

Dialog Boxes

Tempus primarily uses the standard dialog boxes that are available through GEM.

Within these dialog boxes the ASCII character NUL ($00) cannot be entered, this is a GEM limitation. However, you can enter all other characters in the ST character and the method of doing this is described in **Chapter 2** under **Using ASCII Codes.**

Almost all fields in a dialog box that can be selected by clicking on them with the mouse can also be selected from the keyboard. Generally, this is done with the Alt key and another letter. The exact keys used will be described for each dialog box and shown in a table like this one:

Alt-O	Overwrite
Undo	Cancel
Alt-A	Append
Return	Rename
Enter	Rename

The keyboard shortcuts are shown in the left column of the table and the corresponding entries in the dialog box are shown on the right, either as the text on the button or as a description.

Internal Errors

In some parts of Tempus the program checks itself to make sure nothing is wrong. If some error occurs during these checks, an Alert with an internal error message will pop up.

If this should happen, please write to HiSoft, giving the internal error number and an exact description of what you were doing that caused the error. This will help us track down any obscure bugs and correct them as quickly as possible.

Basic Parameters

Tempus 2 is almost completely configurable by the user; you can change all the keyboard shortcuts, install your own printer settings and save the editor, configured as you like to use it.

The Keyboard, System and Printer Settings are held in separate files (called KEYSYS.INS and PRINT.INS) and these need to be compiled by Tempus in order to install them. However, there are also some *Basic Parameters* that do not need to be compiled and are inherent to Tempus 2. These are listed in **Chapter 10** and mentioned throughout the manual.

In order to save a copy of Tempus with your own settings installed, simply choose Save Settings ... from the Parameters menu and check the settings you want to save. More details are given in **Chapter 10**.

Tempus' Memory Management

Tempus can hold up to four separate files in memory simultaneously. The only limit to file sizes is the total memory available for use by Tempus. If you have 1000k free on your ST, you can have one file of 1k length and another of 999k length and no more. The length of a file is limited only by the available memory; if you are editing only one file, Tempus will devote all of its memory to that one file.

Not Enough Memory

If Tempus finds that there is not enough memory to complete an operation, it will put up an Alert box saying so.

Some commands will check for available memory before execution, others will notice the lack of memory only while they are executing. Either way, there is no danger to your text file; the command will be aborted in both cases.

Reclaiming Memory

Tempus commands use memory to a greater or lesser degree. Sometimes, Tempus will put up a small Alert box asking you to wait for a few moments while it reclaims some memory. There is no cause for concern. Once the reorganisation in memory is finished, the Alert will disappear and you can continue working.

The Keyboard

Key Combinations

Key combinations are entered by using a modifier key such as Alt, Control, Shift and Caps Lock in combination with another key. The left and right Shift keys are functionally identical. A *normal* key is a key that is not a modifier.

Tempus makes a distinction between six different *levels* on the keyboard. A level is defined as all key combinations that can be entered using one or more of the modifier keys. The following is a brief description of the levels:

The Control Level

The Control key is pressed in combination with a normal key.

The Shift-Alt Level

Both Shift and Alt are pressed in combination with a normal key.

The Alt Level

The Alt key is pressed in combination with a normal key.

The Shift Level

One or both Shift keys are pressed in combination with a normal key.

The Caps Lock Level

The Caps Lock key is down while a normal key is pressed. Caps Lock is toggled on and off by pressing the Caps Lock key. If Caps Lock is on, Tempus will display a © in the right side of the menu bar.

The Normal Level

A normal key is pressed without any of the modifier keys and Caps Lock is off.

Priority

The different levels have different priorities. In the above descriptions they are ordered highest to lowest priority. For example, the Control level has higher priority than the Alt level. Thus, if a normal key is pressed while both Control and Alt are pressed, the Alt key is ignored due to the Control key's higher priority.

Chapter 2
Text Entry

The Different Text Entry Modes

Tempus 2 differentiates between two primary modes of text entry: *source mode* and *word-wrap* mode.

The major difference between these two main modes is that in word-wrap mode Tempus will automatically wrap your text to the specified line length without you having to explicitly type a carriage return at end of each line.

If you type more than the specified line length in source mode, Tempus will come up with an Alert informing you of this fact. If you are in word-wrap mode, the last word on the line will automatically be brought to the beginning of the next line.

Each file in memory can have a different mode setting; the text entry mode settings are part of the **Basic Parameters**.

Switching Between Modes

You can switch between the two modes as often as you like. The only limitation is that you must convert text that has been entered in source mode before you can use it in word-wrap mode.

If source mode is currently active, there is a check mark next to the Source mode entry in the Mode menu. If word-wrap mode is enabled, Word wrap mode has a check mark next to it.

Enable Source Mode (i_value = 16506)

- select Source mode in the Mode menu
- use the keyboard shortcut Shift-Alt-Q

Enable Word Wrap Mode (i_value = 16508)

- select Word wrap mode in the Mode menu
- use the keyboard shortcut Shift-Alt-W

Left and Full Justification

When in word-wrap mode you can specify whether your text is to be left- or full-justified.

In full-justified mode the line lengths in the text will be made the same through use of special characters between words. In this manner, every line is made to have the maximum specified line length.

In left-justified mode, there is no padding of spaces between words. This has the cosmetic effect of the right border being *ragged.*

Enable Left Justification (i_value = 16510)

- select left justified in the Mode menu
- use the keyboard shortcut Shift-Alt-L

If left justification is enabled, its menu entry will have a check mark next to it.

Enable Full Justification (i_value = 16512)

- select full justified in the Mode menu
- use the keyboard shortcut Shift-Alt-F

If full justification is enabled, its menu entry will have a check mark next to it.

Note: Justification modes can only be selected while in word-wrap mode.

Notes About Word Wrap Mode

Text entry behaves differently when in word wrap mode. The following is a description of the differences you will find.

The main difference between the two text entry modes is that source mode is *line-oriented* while word-wrap mode is *paragraph-oriented.*

In source mode the maximum line length is fixed, this is the maximum size of one *element* (as Tempus perceives it). There is one element per line on the screen. In word wrap mode the *element* of text is a paragraph and the length of such an element is not previously defined.

In word wrap mode one element, i.e. one paragraph, can be distributed over multiple lines on the screen. If the maximum length of a line is exceeded, the line is wrapped to the next and entry continues. A paragraph's end is defined by the explicit entry of a carriage return.

Since the carriage return character has a special meaning in word-wrap mode, it cannot be used as it is in source mode. When text entered in word-wrap mode is saved to disk, the information about the ends of paragraphs is saved as well.

When printing word-wrapped text, paragraph information is passed along to the printer driver as well. If this information is not to be sent to the printer, the meaning of the CR character must be redefined in the printer driver.

A paragraph is made up of a string of words.

If a word is followed by a space, then this space is considered to be part of the word. This means that the last word in a line will always have a trailing space; the space will not be carried over to the beginning of the next line.

Insert and Overwrite Modes

Text entry is always made at the current position of the cursor.

In insert mode, the text following the cursor is moved one character to the right and the typed character is inserted at the cursor position. Then the cursor itself is moved one character to the right.

A character entered while in overwrite mode will replace the character at the current cursor position. After the new character is entered, the cursor moves to the right of the new character.

Each of the files in memory can have a different insert/overwrite mode setting. The setting is part of the **Basic Parameters**.

Enable Insert Mode (i_value = 16514)

- select Insert mode in the Mode menu
- use the keyboard shortcut Alt-I

If insert mode is enabled an I will be visible to the right of the Parameters menu title. The menu item Insert mode in the Mode menu will have a check mark next to it as well.

Enable Overwrite Mode (i_value = 16516)

- select Overwrite mode in the Mode menu
- use the keyboard shortcut Alt-O

If insert mode is enabled an O will be visible to the right of the Parameter menu title. The menu item Overwrite mode in the Mode menu will also have a check mark next to it.

Auto Indent

Auto indent mode is independent of any of the other mode settings.

If auto indent is enabled then, upon hitting Return or Enter, Tempus will check whether the line that has just been ended was indented in any way. If it was, the same indentation will apply to the newly-created line. The cursor will also be positioned under the first character of the previous line. The only exception to this is if the terminated line contains only spaces.

Auto indent mode is very useful when entering structured program source and saves you having to explicitly indent a new line every time.

Auto indent is enabled/disabled separately for each of the files in memory. The settings are part of the **Basic Parameters**.

Toggle Auto Indent Mode (i_value = 16518)

- select Auto Indent in the Mode menu
- use the keyboard shortcut Alt-A

If auto indent is enabled, a check mark appears next to its menu entry.

Auto Scroll Mode

Auto Scroll mode can be enabled/disabled independently of all other modes. In auto scroll mode the contents of the window are scrolled up one line every time the Return or Enter keys are used. This means that the cursor remains on the same line on screen, and is thus easier to find.

This mode is useful when typing in large amounts of text; finding the cursor is much easier on the eye since it's always in the same vertical position.

Auto scroll is enabled/disabled separately for each of the files in memory. The settings are part of the **Basic Parameters**.

Toggle Auto Scroll (i_value = 16520)

- select Auto scroll in the Mode menu
- use the keyboard shortcut Shift-Alt-Z

If auto indent is enabled, a check mark appears next to its menu entry.

Maximum Line Length

If you are typing in source mode and a line becomes longer than the defined maximum line length, an Alert appears warning you that the line is too long; you should shorten the line in some way.

In word-wrap mode the Alert appears if a line becomes longer than 255 characters. Tempus cannot process lines that are longer than 255 characters.

Notes About Text Entry

You can enter text generally only in the current window. Each of the files in memory has a separate cursor position. The cursor position determines where text entry occurs.

Disappearing Mouse

So that the mouse cursor is not in the way, it is removed when a normal character is typed or when some commands are executed. Moving the mouse will cause the mouse cursor to reappear.

Entering Special Characters

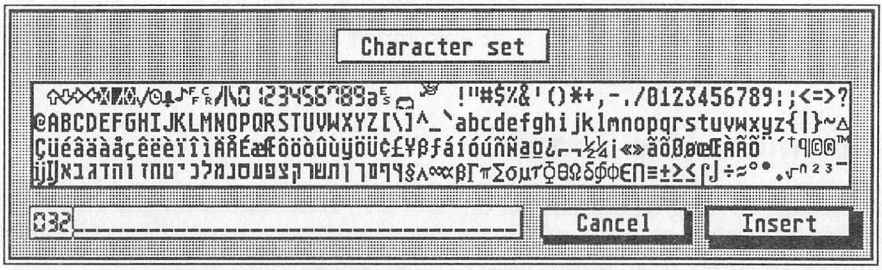
The Character Set Command

The character set command provides a dialog box from which you can choose characters from the ST character set. You can use this dialog box to build a string that will be inserted at the current cursor position when you click on the Done button.

Character Set (i_value = 16474)

- select Character Set... in the Special menu
- use the keyboard shortcut Control-+

The following dialog box will appear:



To select one of the displayed characters, just click on it with the mouse pointer. While the left mouse button is depressed, the character under the pointer will be displayed in inverse video.

If you double-click on a character, it will be added to the end of the built string and then the built string will be copied into the text, as if the Done button had been selected.

Clicking on the Done button will cause the string built at the bottom of the dialog box to be inserted into the text at the current cursor position. The Return and Enter keys have the same effect as clicking on Done.

Clicking on the Cancel button causes you to return to your text without the text being altered. Any characters you may have selected while in the dialog box are lost. Pressing the Undo key will have the same effect as clicking on Cancel.

Undo	Cancel
Return	Done
Enter	Done

Using ASCII codes

Normally, most special characters in the ST character set are not accessible directly through the keyboard.

Within Tempus, one way of getting at these characters is by using the Character Set command. However, this will interrupt the flow of writing, since you have to devote your attention to using the mouse.

There is a second way of accessing these special characters by entering the ASCII code of the character that you want. This method will work in most of Tempus' dialog boxes as well as in the current text window.

To generate a character, hold down the Alt key and enter the ASCII code of the character that you want on the numeric keypad of your ST keyboard. Let go of the Alt key only after you have entered all the digits of the ASCII code. If three digits are entered, the character is automatically generated. If only two digits are entered, the character will not be generated until the Alt key is let go.

If you want to enter multiple special characters, it is advisable to enter the ASCII codes as three-digit codes so that you can rapidly enter the sequence. If an ASCII code is only one or two digits in length, use preceding zeros to make it a three digit number.

Note: Because of this feature there has been a small change in keyboard shortcuts from previous versions of Tempus. The affected command is Quit and Save without Backup. This command was moved from the Alt level to the Shift-Alt level.

Editing Commands

The following is a description of the available editing commands within Tempus 2.

Delete to End Of Line (i_value = 16676)

Alt-. (Alt and full-stop; think of it as Alt->)

The text under the cursor and following it on the current line is deleted.

Delete to Beginning Of Line (i_value = 16674)

Alt-, (Alt and comma; think of it as Alt-<)

The text under the cursor and preceding it on the current line is deleted.

Swap Line Up (i_value = 16718)

Control-~

The current line is moved up one, i.e. the line above the current line is swapped with the current line.

Swap Line Down (i_value = 16720)

Alt-~

The current line is moved down one, i.e. the line below the current line is swapped with the current line.

Duplicate Line (i_value = 16680)

Control-Insert

The current line is duplicated; the cursor ends up on the lower of the two lines.

Move Line (i_value = 16690)

Alt-Backspace

When Alt-Backspace is entered for the first time, the current line is copied into an internal buffer and deleted from the current text. Now move the cursor to the line where the copied line should go and press Alt-Backspace again. The line will be copied out of the internal buffer into the text. The line on which the cursor was positioned is moved under the copied line.

Tab Forward (i_value = 16582)

Tab

The cursor and any text under and following it are moved forward to the next tab position. The open space created is filled with spaces.

Tab Backwards (i_value = 16726)

Control-Tab

The cursor and any text under and following it are moved backward to the nearest preceding tab stop. Any intervening text is deleted.

Limited Tab Backwards (i_value = 16724)

Alt-Tab

If there are spaces preceding the cursor, they are deleted until the nearest preceding tab stop. The cursor is moved backwards as well.

Uppercase/Lowercase Conversion (i_value = 16678)

Control-G

The character under the cursor is toggled from upper to lowercase or vice versa. The cursor is moved right one column.

Delete Word (i_value = 16574)

Control-T

If the cursor is at the beginning of a sequence of spaces, these are deleted. If the cursor is within a word, the characters under and following the cursor are deleted until a white space is reached. The following characters are also accepted as word delimiters, i.e. Delete Word will stop at these characters too: `( ) + - * / : ; . [ ] { } " ' , CR Tab.` You can change these delimiters, see **Chapter 10**.

Delete Line (i_value = 16576)

Control-Y
F8

The current line is deleted. Undo and Shift-Undo will undo this command (see **Chapter 6**).

Insert Line (i_value = 16596)

Shift-Insert

An empty line is inserted in front of the current line.

Insert Character (i_value = 16594)

Insert

The text under and following the cursor on the current line is moved one character to the right. A space character is inserted into the created space. The cursor position is not changed.

Delete Character (i_value = 16586)

Delete

The character under the cursor is deleted and the following text is moved to the left to fill the gap. The cursor position is not changed.

If the cursor is at the end of a line, nothing will happen. You cannot delete characters on following lines with this command.

Delete Character on Following Lines (i_value = 16588)

Shift-Delete

This is an extension of Delete Character. If the cursor is at the end of a line when this command is executed, the following line is appended to the current line.

Delete Character to Left of Cursor (i_value = 16578)

Backspace

The character to the left of the cursor is deleted. The characters under and to the right of the cursor are moved left to fill the gap.

If the cursor is at the beginning of a line, nothing will happen. You cannot delete characters on preceding lines with this command.

Delete Character on Preceding Lines (i_value = 16580)

Shift-Backspace

This is an extension of the Backspace command. If the cursor is at the beginning of a line, the current line is appended to the preceding line.

Horizontal Block Movement

The two following commands move the text selected in a block one character forward or back. These commands can be used to format structured source code.

All lines that are to be affected must be part of the selected block. The starting column of the block is only relevant since the commands affect all text on the line after the starting column position.

Move Block to the Right (i_value = 16686)

Control-Space

The lines of text within the marked block are moved one character to the right. The resulting gap is filled with spaces.

Move Block to the Left (i_value = 16688)

Alt-Space

The lines of text within the marked block are moved one character to the left. Those characters preceding the start of the block are deleted. You cannot delete beyond column 0 in this way.

Cursor Positioning

Text entry is possible only in the current file. Each file has its own cursor. The position of the cursor determines where characters are entered in the current file.

Cursor Positioning Modes

Each file can have one of three cursor positioning modes active:

a) Free Cursor Positioning

In this mode, the cursor can be placed on any line in any column less than or equal to the maximum line length. Thus, the cursor can be positioned at a place where there is no text. When the cursor is moved vertically its column position is maintained.

Enable Free Cursor Positioning (i_value = 16522)

- select Free in the Mode menu
- use the keyboard shortcut Shift-Alt-Numeric 9

b) Keep within Text

In this mode, the last column in which a cursor can be positioned is determined by the amount of text in a given line. The cursor can only be placed where there is already text, or at the position after the last character on a line. When the cursor is moved vertically its column position will be maintained.

Enable Keep within Text (i_value = 16524)

- select Keep prev col in line in the Mode menu
- use the keyboard shortcut Shift-Alt-Numeric 8

c) Keep within Text and maintain Original Column

This mode is identical to mode b) except that Tempus will attempt to retain the original column position of the cursor during multiple commands that move it up and down.

For example, say there are three lines:

- Line 1 contains 40 characters
- Line 2 contains 10 characters
- Line 3 contains the cursor at column 20

Starting at (line 3, column 20), moving the cursor up one line will put it at (line 2, column 10), since there are only 10 characters in that line. Move it up one more line and the cursor will be placed in (line 1, column 20), restoring the original column from line 3. In mode b) the cursor would go (line 3, column 20), (line 2, column 10), (line 1, column 10), preserving the previous cursor position, where possible.

Enable Keep Original Column (i_value = 16526)

- select Keep 1st-line column in the Mode menu
- use the keyboard shortcut Shift-Alt-Numeric 7

All previous versions of Tempus used mode c).

Each of the files in memory can have a different positioning mode setting. The setting is part of the **Basic Parameters.**

Cursor Commands

The following commands apply only to the cursor that is in the current window.

The visible area of the text in the current window should almost always contain the cursor.

Move Cursor Left (i_value = 16600)

Arrow Left

The cursor is moved one character to the left. If the cursor is at the beginning of a line, it is moved to the end of the previous line.

Move Cursor Right (i_value = 16598)

Arrow Right

The cursor is moved one character to the right. If the cursor is at the end of a line, it is moved to the beginning of the following line.

Move Cursor Up (i_value = 16602)

Arrow Up

The cursor is moved up one line.

Move Cursor Down (i_value = 16604)

Arrow Down

The cursor is moved down one line.

Scroll Up (i_value = 16610)

Shift-Arrow Up

The contents of the window move down one line. The cursor is not moved.

Scroll Down (i_value = 16608)

Shift-Arrow Down

The contents of the window move up one line. The cursor is not moved.

Move to Beginning of Line (i_value = 16566)

Shift-Left Arrow
F3

The cursor is moved to the beginning of the current line.

Move to End of Line (i_value = 16568)

Shift-Right Arrow
F4

The cursor is moved to the end of the current line.

Note: in Free Cursor Positioning mode, if the cursor is on the last character on a line, it is moved to the maximum line position.

Move Word Left (i_value = 16570)

Control-Arrow Left
F5
Control-A

The cursor is placed at the beginning of the preceding word. If the cursor is already at the beginning of the line, nothing will happen.

Move Word Right (i_value = 16572)

Control-Arrow Right
F6
Control-F

The cursor is placed at the beginning of the following word. If the cursor is already at the end of the line, nothing will happen.

Move Cursor to Next Tab Stop (i_value = 16584)

Shift-Tab

The cursor is placed on the following tab stop. If the next stop cannot be reached, the cursor is placed at the end of the line.

Move Cursor to Previous Tab Stop (i_value = 16722)

Alt-Shift-Tab

The cursor is placed on the previous tab stop.

Page Up (i_value = 16554)

Control-Arrow Up
F1
Control-R

The contents of the window are moved down a whole page of text. The cursor is effectively moved with the text which means that in most cases it will stay in the same screen position; the exception to this is when you are Paging Up within the first two pages of text in which case the cursor will try to move a whole page but the display may not reflect this and the cursor position will change - try it out.

Page Down (i_value = 16556)

Control-Arrow Down
F2
Control-C

The contents of the window are moved up a whole page of text. The cursor is effectively moved with the text which means that in most cases it will stay in the same screen position; the exception to this is when you are Paging Down within the last two pages of text in which case the cursor will try to move a whole page but the display may not reflect this and the cursor position will change - try it out.

Move cursor to start of following line (i_value = 16684)

Shift-Return
Shift-Enter

The cursor is moved to the beginning of the following line.

Cursor Home (i_value = 16606)

Home

The cursor is moved to the first character in the window.

Using the Mouse

You can position the cursor within the current window with the mouse simply by clicking on where you would like the cursor to be.

Bookmarks

A bookmark marks a specific place in a file, it contains the co-ordinates of the row and column.

If changes to the text cause a marked area of text to be moved, the bookmark moves as well.

Bookmark Commands

A maximum of five bookmarks can be defined per file. The bookmarks are numbered 1 through 5.

A bookmark is placed by positioning the cursor where you would like the bookmark to be and executing the appropriate command.

Set Bookmark 1 (i_value = 16428)

- select Bookmark 1 in the Goto menu
- use the keyboard shortcut Control-1

To set bookmarks 2-5 use Control-2 through Control-5 or the analogous menu selections.

Jump To Bookmark 1 (i_value = 16400)

- select the area to the right of the Bookmark 1 entry in the Goto menu
- use the keyboard shortcut Alt-1

To jump to bookmarks 2-5 use Alt-2 through Alt-5 or the analogous menu selections.

The line number of a marked Bookmark is displayed in the relevant menu entry.

Set Bookmark 2 (i_value = 16430)
Set Bookmark 3 (i_value = 16432)
Set Bookmark 4 (i_value = 16434)
Set Bookmark 5 (i_value = 16436)

Jump to Bookmark 2 (i_value = 16402)
Jump to Bookmark 3 (i_value = 16404)
Jump to Bookmark 4 (i_value = 16406)
Jump to Bookmark 5 (i_value = 16408)

Other Quick Access Methods

Aside from using the 5 Bookmarks, you can also jump directly to other parts of your text. In these cases the relevant line number is also displayed in the respective menu entries.

Jump to Beginning

This command places the cursor in line 1, column 0.

Jump To Beginning (i_value = 16442)

- select Text start in the Goto menu
- use the keyboard shortcuts Alt-T or Shift-Home

Jump To End

This command places the cursor at the beginning of the last line in the text.

Jump To End (i_value = 16410)

- select Text End in the Goto menu
- use the keyboard shortcuts Alt-E or Control-Home

Jump To Line

The jump to line command puts the cursor at the beginning of the specified line. When calling this command you will enter the line number in a dialog box.

After entering the desired line number, press Return or Enter and the cursor will be placed at the beginning of the specified line. If no line number is entered, nothing will happen.

Jump To Line (i_value = 16438)

- select Line ... in the Goto menu
- use the keyboard shortcut Alt-Z

Jump To Page

The jump to page command is identical to the jump to line command except that you must enter a page number instead of a line number.

Jump To Page (i_value = 16440)

- select (Print-) Page in the Goto menu
- use the keyboard shortcut Control-D

Note: There is a difference between screen pages and printing pages. The jump to page command refers to printing pages which tend to be longer than screen pages.

Jump To Beginning of Block

This command puts the cursor at the beginning of the currently selected block. This command is valid only if block markers are defined.

Jump To Block Start (i_value = 16412)

- select Block start in the Goto menu
- use the keyboard shortcut Alt-B

Jump To End of Block

This command puts the cursor at the end of the currently selected block. This command is valid only if block markers are defined.

Jump To Block End (i_value = 16414)

- select Block end in the Goto menu
- use the keyboard shortcut Alt-K

Jump To Last Position

Some commands change the position of the cursor. Before these commands are executed, Tempus remembers the last cursor position. The jump to last position command puts the cursor back where it was before such a command.

Only one position is remembered. These are the commands where the last position is remembered:

- Add Text
- Search for String
- Search Again
- Search and Replace
- Jump To Bookmark
- Jump To Line
- Jump To Page
- Jump To Beginning
- Jump To End
- Jump To Block Start
- Jump To Block End
- Jump To Last Position
- Using the vertical scroll bars
- Using the right Mouse button to change the cursor's position

Jump To Last Position (i_value = 16416)

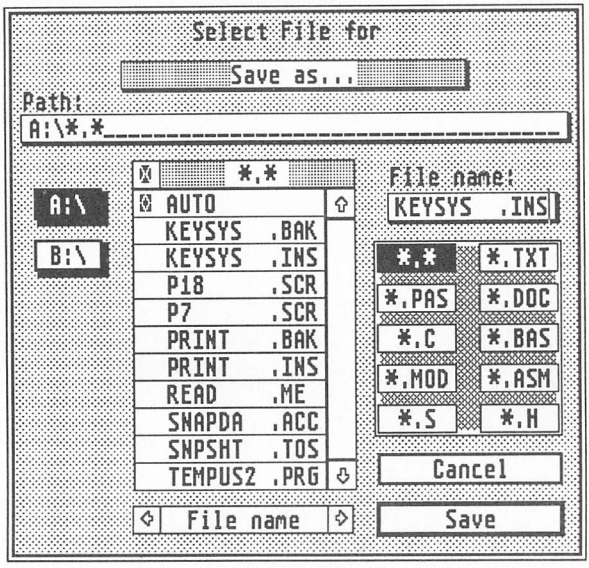
- select Last Position in the Goto menu
- use the keyboard shortcut Control-Z.

Chapter 3
File Commands

The File Selector

Tempus has its own custom version of the GEM file selector. The enhancements are:

- The command that caused the file selector to appear is displayed.
- A pathname can be up to 42 characters long.
- Buttons to select available drives quickly are provided.
- Used and unused space on disk is displayed.
- Names, sizes, modification dates and times of files in the current directory can be displayed.
- 10 selectable search masks are provided as buttons for quick access. The masks can be customized to fit your needs and saved on disk.



The Tempus File Selector

The Pathname

The path field can contain a maximum of 42 characters to specify the current search path and search mask. Such long pathnames are usually the result of having documents in sub-directories that are nested several levels deep.

If you enter a path via the keyboard, as opposed to selecting sub-directories with the mouse, you must click on one of the selectable objects, e.g. the search mask buttons, for the new path to be recognised. If the path string that you enter is invalid, Tempus will try to correct it as best it can.

Selecting Files

You can select the displayed files both via the mouse and by using the keyboard. If you double-click on an entry in the list, you not only select that particular file, but also leave the dialog box. You can also enter the file's name via the keyboard; the name is displayed in the File Name editable text field.

The Search Mask

The search mask can help you narrow down the choices that are displayed in the file selector dialog box. This way you can search specifically for files with certain extensions and avoid scrolling up and down the list to find the file that you are looking for. By clicking on one of the buttons, you change the search mask in the path name field. You can also change the mask manually by altering the path name field directly.

The displayed directory is not altered by selecting another search mask. Only the files in that directory conforming to a search mask will be displayed; if you change masks, only those files conforming to the newly selected mask will be shown.

Directories

You can move around the directory hierarchies in different ways and directly edit the path string to suit your needs. You can select the name of a sub-directory by single-clicking on it. To rise one hierarchical level higher, single-click on the close box in the file selector. Double-clicking on the close box causes the root directory of the current drive to be displayed.

Drives

As with directories and search masks, you can also change the drive being looked at by editing the path string. The buttons to the left of the list of files makes selecting the current drive easier. Up to 7 drives will be given buttons. If there are more drives on-line, you can access them only by changing the path string.

Tempus associates a path with each drive. If you change drives and then change back, Tempus will remember the entire path as you had left it before changing drives.

File Information

Additional file information can be displayed by Tempus. To cycle through the different display options, use the arrow keys on the side of the bottommost field of the display list.

This field contains the information type currently being displayed. There are four types: file name, file size, last modification time and last modification date.

Read Directory

To cause Tempus to read (or re-read) a directory, select one of the search mask fields. If a re-read is desired, click on the current search mask.

Changing the Search Masks

By double-clicking on them, you can edit the buttons that contain the search masks. Once you have double-clicked, the button turns into an entry field of up to five characters in length.

When you are done, single-click on the field to use the edited search mask to display the current directory. A re-read can be suppressed by using Return or Enter, or double-clicking again.

Any changes made to the search mask buttons can be saved. They are part of the **File Selector** parameters.

Drive Information

By double-clicking on a drive button, you can have Tempus display allocation information about the drive. This is only available for those drives that have a button.

The following information is displayed: total capacity of the drive, free space on the drive, used space on the drive and the number of files and sub-directories in the current directory.

The number of files is dependent on the current search mask.

Installable File Selection Parameters

Some of the settings that can be made in the file selector can be saved as part of the **File Selector** parameters.

The saveable settings are: the 10 search masks, the path and the displayed file name.

The keyboard shortcuts for the file selector are on the next page.

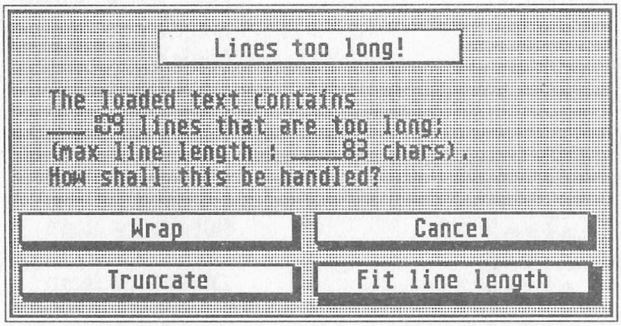
Keyboard Shortcuts

Alt-S	Close button
Alt-M	Select Filename field
Alt-O	Scroll down
Alt-K	Scroll up
F1	Disk drive button
F2	Disk drive button
F3	Disk drive button
F4	Disk drive button
F5	Disk drive button
F6	Disk drive button
F7	Disk drive button
Alt-1	Directory item
Alt-2	Directory item
Alt-3	Directory item
Alt-4	Directory item
Alt-5	Directory item
Alt-6	Directory item
Alt-7	Directory item
Alt-8	Directory item
Alt-9	Directory item
Alt-0	Directory item
Alt--	Directory item
Shift-F1	Search mask
Shift-F2	Search mask
Shift-F3	Search mask
Shift-F4	Search mask
Shift-F5	Search mask
Shift-F6	Search mask
Shift-F7	Search mask
Shift-F8	Search mask
Shift-F9	Search mask
Shift-F10	Search mask
Control-←	Attributes box left
Control-→	Attributes box right
Undo	Cancel
Return	Load, save etc.
Enter	Load, save etc.

Loading Files

Tempus can have up to four files open at the same time.

After loading a file, Tempus will check whether the file's lines are of an acceptable length. If there is a problem, the following dialog box will appear:



There are four different ways of continuing.

Wrap: those lines that are longer than the specified maximum length will be wrapped around to a newly created next line. This way the maximum line length remains in effect and you lose none of the data that was on parts of lines greater than the maximum line length.

Cancel: the file is not loaded.

Truncate: those lines that are longer than the maximum line length will be truncated. All data from the ends of the long lines will be lost.

Fit line length: the maximum line length is changed to fit the longest line in the loaded file. If any line is longer than 255 characters, this button will appear crossed out. This means that if you select it, all lines that are longer than 255 characters in length will be truncated and the maximum line length will be set to 255 characters.

Alt-K	Wrap
Undo	Cancel
Alt-S	Truncate
Return	Fit line length
Enter	Fit line length

Load File

This command will load a file from disk into one of the four available slots. If there are already four files being edited, this command cannot be executed.

Tempus' file selector dialog box will appear. Here you either select the file to load or the name of a file to be created.

If the file that is entered does not already exist, Tempus will prompt you whether you wish to create a new file.

Unless you have aborted the process at some point, a text window will then open. It will be empty in the case of a newly created file, or will contain the contents of the file that has been loaded.

Load File (i_value = 16536)

- select Open file... in the File menu
- use the keyboard shortcut Alt-X

Restoring a File

This command is similar to the load file command. It will reload the current file from disk into the current window, overwriting the current window's contents. This is useful if you realise that you have made some mistakes editing this file and want to start again.

Reload this File (i_value = 16418)

- select Reload in the File menu
- use the keyboard shortcut Control-U

Insert Text

The Insert Text command takes the contents of an existing file and inserts it at the current cursor position within the file being edited.

Insert Text (i_value = 16420)

- select Insert text... in the File menu
- use the keyboard shortcut Alt-R
- move the DISK icon over the current text's icon

Saving Files

If, when saving a file, an alert appears telling you that there is not enough room to save the entire file, Tempus will save as much of the file as it can. If you wish to delete the fragment that Tempus has saved, you must explicitly do it with the Delete file... command.

Save with Backup

This command will save the current file under its current name. If a file of that name already exists, its extension will be changed to BAK so that the current text can be saved under its own name. If a file with the same name and BAK extension exists, it will be deleted to make room for the new BAK file.

Save with Backup (i_value = 16422)

- select With Backup in the File menu
- use the keyboard shortcut Control-S
- drag the current text's icon onto a DISK icon.

Save without Backup

This command is identical to the previous command except that it does not create a backup file, nor does it affect any existing duplicate files in any way. If a file with the same name and extension as the current file exists, it will be overwritten.

Save without Backup (i_value = 16424)

- select Without Backup in the File menu
- use the keyboard shortcut Alt-S

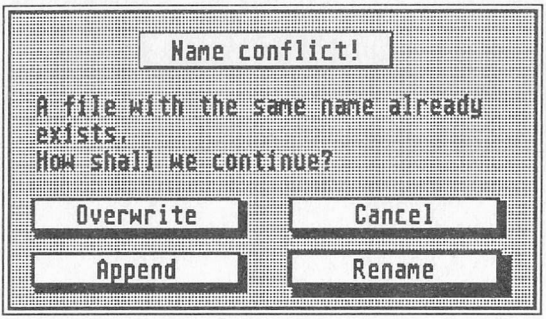
Save As

This command lets you choose the name of the file to be saved before the file is actually saved.

Save As (i_value = 16426)

- select Save as... in the File menu
- use the keyboard shortcut Alt-W

If a file with the chosen name already exists, the following dialog box will appear



You have four ways of proceeding. Cancel aborts the command. Overwrite causes the already existing file to be overwritten. Rename changes the already existing file to have a BAK extension. Append causes the current text to appended to the existing file.

Alt-O	Overwrite
Undo	Cancel
Alt-A	Append
Return	Rename
Enter	Rename

If you have changed the path during the course of a save then, when the save has finished, you will be prompted whether Tempus should retain the path setting as the current path.

Deleting Files

You can delete files with the Delete File command. Using Tempus' file selector, you select the file that is to be deleted. Before the file is actually deleted, you will be asked once more whether you really wish to delete the file.

Delete File (i_value = 16538)

- select Delete file... in the File menu
- use the keyboard shortcut Shift-Alt-D
- drag the DISK icon to the TRASH icon

Chapter 4
Block Commands

While editing a text file it is often useful to be able to copy, delete and save selected areas of text. Tempus' block commands support these functions and more.

Defining a Block

Before executing any of the block commands, a block must first be defined. This is done by choosing the start and the end of the block.

In monochrome, a block is seen on the screen as being on a grey rather than a white background. On colour screens, the text in a selected block is displayed in different colour from the rest of the file.

Note: If the block end is before the block start, the area in between is referred to as the *inverse block*. As of this version of Tempus, almost all block commands have no effect on the inverse block area. If you try to use a block command on an inverse block area, an alert will appear.

You can move blocks between files.

Setting Block Markers

The two commands Set block start and Set block end define the beginning and end of a block, respectively.

Set Block Start (i_value = 16470)

- select Set block start in the Block menu
- double-click on a character in the text file
- use the keyboard shortcut Control-B

Set Block End (i_value = 16472)

- select Set block end in the Block menu
- double-click on character in the text with the *right mouse key*
- use the keyboard shortcut Control-K

Missing Block Definition

If a block command is executed with either the block start or end undefined, Tempus will define the missing marker automatically. If the start is missing, the beginning of the text is set to be the start. If the end is missing, the end of the text is set to be the end of the block.

The Block Commands

Move Block

This command will move the contents of the marked block to the current cursor position. A block cannot be moved within itself. Moving a block effectively deletes it from its original position.

Both of the block markers are moved as well, so are any bookmarks within the block.

Move Block (i_value = 16392)

- select Move block in the Block menu
- use the keyboard shortcut Control-V
- drag the Block icon to the text's icon

Copy Block with Markers

The Copy Block command *copies* (i.e. does not delete the original block) the block to the current cursor position. The start and end block markers are moved to the copy.

Copy Block with Markers (i_value = 16396)

- select Copy with markers in the Block menu
- use the keyboard shortcut Alt-C

Copy Block without Markers

This command is identical to the previous command, except that the block start and end markers stay with the original block.

Copy Block without Markers (i_value = 16394)

- select Copy without markers in the Block menu
- use the keyboard shortcut Shift-Alt-C

Delete Block

This command deletes the contents of the block area from the text. It can be undone with the Undo key.

Delete Block (i_value = 16398)

- select Delete block in the Block menu
- use the keyboard shortcut Alt-Y
- drag the Block icon to the Trash icon

Save Block

This command enables you to save the contents of the block to a separate file.

Save Block (i_value = 16384)

- select Save block as... in the File menu
- use the keyboard shortcut Control-W
- drag the Block icon to the Disk icon

Print Block

This command prints the contents of the block.

Print Block (i_value = 16384)

- select Print block in the Block menu
- use the keyboard shortcut Alt-P
- drag the Block icon to the Printer icon

Delete Block Markers

This deletes the block markers and removes the visual effects of the marked block area.

Delete Block Markers (i_value = 16388)

- select Remove block markers in the Block menu
- use the keyboard shortcuts Control-H or F10

Complement Block Markers

Redefines the block markers so that the previously non-block area becomes the marked block and vice versa. This may not always be useful and can mean that you may have two marked blocks. Many of the block commands will not work if you have two marked blocks and you will be told this by an alert box. However, this command can sometimes be useful if you have a block that either starts at the start of the file or ends at the end of the file.

Complement Block Markers (i_value = 16386)

- select Complement block in the Block menu
- use the keyboard shortcut Alt-H

Chapter 5
General Commands

Search and Replace

Tempus 2 has a wide range of very powerful search and replace features. You will only get to know them well by trying them out; we suggest that you take a backup of any text file before experimenting with replace!

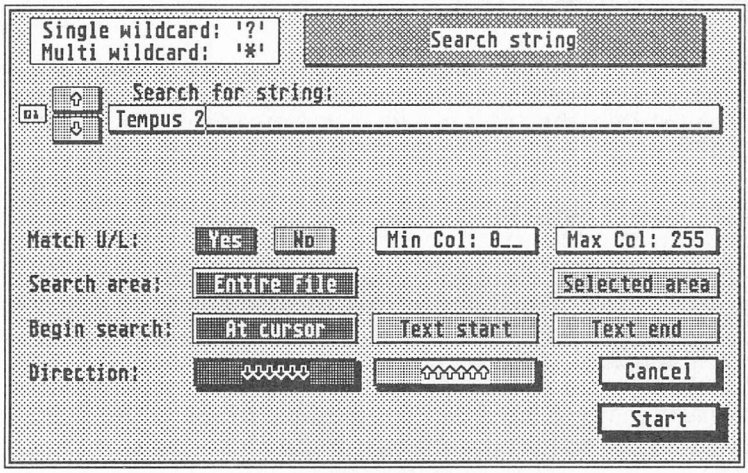
Search

Tempus' search command will not work over multiple lines. The string that is to be searched for must be on one line only.

Search (i_value = 16444)

- select Search... in the Text menu
- use the keyboard shortcut Control-L

The following dialog box will appear:



The string that is to be searched for should be entered in the editable text field near the top of the dialog box.

Switching to other strings

Tempus has a buffer for up to 20 search strings. By using the arrow buttons to the left of the field, you can scroll through the strings that Tempus has remembered.

There are various options that allow you to control the search.

Search Area

You can search over the entire file, the current block (if there is one selected) or a specified area. If you choose to explicitly define an area by clicking on Selected area, you will see two editable text fields appear. The line numbers of the start and end search lines should be entered in these fields.

Search Direction

The search direction is relative to where the search starts. If you are searching the entire file, you can specify whether to start at the beginning of the file, the end of the file, or at the current cursor position. If you are searching within a block, you can start searching from the start or end of the block, or from the current cursor position. The same options are available for an explicitly specified area.

Case Differentiation

You can choose whether Tempus will differentiate between upper and lower case in the search string and subsequently during the search. Click Yes against the Match U/L: question to search for the string exactly as entered, click No to ignore the case of the string.

Search area within a line

Since Tempus' searches work on a line-by-line basis, you have the option of specifying which part of any given line is to be searched. For instance, you can specify that only the first 20 characters in a line are searched before Tempus goes on to the next line.

The first and last columns can be specified in the editable text fields to the right of the Match U/L: buttons in the dialog box.

Wildcards

You can specify two different types of wildcards in your search string. The single wildcard, ?, stands for one character of any value, while the multi wildcard, *, stands for any number of characters of any value. For example, the search string ???day would find both Monday as well as Friday. The string *day would find any string that ended in the three letters day.

You can change the characters that are to be used as wildcards. They are part of the **Basic Parameters**.

The Search

After you have entered the appropriate information in the search dialog box, pressing Return or Enter will start the search. If you wish to leave the dialog box without starting the search, click on the Cancel button, or press Undo.

If Tempus finds a string matching your search string, the cursor will be placed at the beginning of the found string. If Tempus could not find the string, a dialog box will appear asking you whether you wish to enter a new search string or go back to editing your text.

Search Again

This command is useful if you would like Tempus to search again with the same search string and the same options. This way you can avoid having the search dialog box appear every time; Tempus will start the search immediately. If there is no current search string, Search Again cannot be executed.

Search Again (i_value = 16446)

- select Search again in the Text menu
- use the keyboard shortcuts F7 or Alt-L

Search and Replace

The search and replace command is an extension of the search command. Instead of simply finding a string, you can replace the found string with another. The differences in the Search and Replace dialog box are that there is a second line for the replacement string and you can choose how many times the replacement is done.

The replacement field also has arrows to scroll through the 20 line buffer of replace strings. This is not a separate buffer from the search string buffer. A problem can arise when both the search and the replacement string have the same buffer number (visible in the little box to the left of the up/down buttons). If one of the strings is changed, the other field will not reflect the change, although internally the strings are identical.

You can use wildcards in the replacement string. Any wildcard in the replacement string refers to a wildcard in the search string. The wildcard in the replacement string signifies the characters that are the same as those specified by the search string wildcards.

Wildcards in the replacement string field contain the wildcard character and a numeral 0 to 9; up to 10 wildcards from the search string may be referenced. You can reference a wildcard from the search string more than once.

Example:

Search string:	They went * on *
Replacement string:	They are going *0 before *1
would change:	They went swimming on Tuesday
to:	They are going swimming before Tuesday

If the references between search and replacement wildcards are unclear, an alert will appear.

You have the option of specifying how many replacements are made. A search and replace can be done Once or Tempus can Ask before replacing, or you can replace throughout the entire file with the All option.

If you select Ask, every time Tempus finds a matching string, it will display the string in the fourth line from the top of the screen, highlighted. You then have the option of replacing the found string, continuing with the search or aborting the search.

After Search and Replace has finished, a dialog box will appear telling you how many times the search string was replaced.

Note: You can abort the Search and Replace process by pressing both mouse keys simultaneously.

Alt-U	Previous search string
Alt-H	Next search string
Alt-O	Previous replace string
Alt-K	Next replace string
Alt-J	Yes to Match U/L:
Alt-N	No to Match U/L:
Alt-G	Whole text
Alt-B	Block area
Alt-W	Selected area
Alt-Y	At cursor
Alt-A	Text start, Block start
Alt-E	Text end, Block end
Alt-V	Search forward
Alt-R	Search backward
Alt-1	Once
Alt--	Ask
Alt-I	All
Undo	Cancel
Return	Start
Enter	Start

Search and Replace (i_value = 16448)

- select Search & Replace... in the Text menu
- use the keyboard shortcut Alt-E

Generating Cross-References

Tempus will search through a file for a specific string and then append a list of the string's locations to a file. One use for this is to determine where in a file a particular variable is referenced. When using this command you must first set up the string using Search.

Setting the parameters

First, use the Search command to set up the string that you wish to cross reference together with any of the search options you would like in force. After setting the appropriate options and having entered the search string, you should click on Cancel. Now choose Cross reference... from the Text menu.

Generate Cross-Reference (i_value = 16450)

- select Cross reference... in the Text menu
- use the keyboard shortcut Control-Q

The following options can be specified:

Target File

The generated cross reference must always be appended to an existing file that has been loaded. The buttons that are available specify which of the loaded files the list can be appended to; choose the one you want by clicking in its box.

Position Information

You can have Tempus generate the position of the string as any combination of line, column and page references.

References per Line

You can specify the maximum number of references that Tempus will put on one line. If you specify zero, Tempus will put as many references on a line as it can.

Digit Type

You have the option of Tempus displaying the references in digital numerals or in normal (system font) numerals.

Return or Enter will start the cross-reference generation.

The Cross Reference

The first line of the generated cross-reference contains the search string. The following lines contain the position information that the search yielded. The information is displayed in the order line, column and page number. This is dependent on which type of information you asked to be generated.

The cross reference is generated in such a way, that you can use the right mouse button to jump directly to the occurrence of the string (see **Chapter 6**).

Alt-1	Append to file 1
Alt-2	Append to file 2
Alt-3	Append to file 3
Alt-4	Append to file 4
Alt-Y	Line
Alt-S	Column
Alt-P	Page
Alt-D	Digital
Alt-N	Normal
Undo	Cancel
Return	Start
Enter	Start

Sorting Lines

You can alphabetically sort all the lines in your text or those that are in a block. The comparison for the sort begins in the leftmost specified column and ends in the rightmost specified column.

Sort Lines (i_value = 16454)

- select Sort lines... in the Text menu
- use the keyboard shortcut Shift-Alt-S

The sort dialog box offers several options. You can specify whether the entire text is to be sorted, or just the contents of the block (provided it is defined). You can choose whether you would like an ascending or descending sort and which columns of the lines are affected by the sort. The last option is defined by entering the number of the first and last column that will be considered relevant by the sort. This is similar to the search option that specifies which parts of a line will be searched.

Note: This command will not move either the block markers or any bookmarks that you might have set.

Shift-↑	Ascending
Shift-↓	Descending
Alt-G	All lines
Alt-B	Block lines
Alt-I	min Col:
Alt-X	max Col:
Undo	Cancel
Return	Sort
Enter	Sort

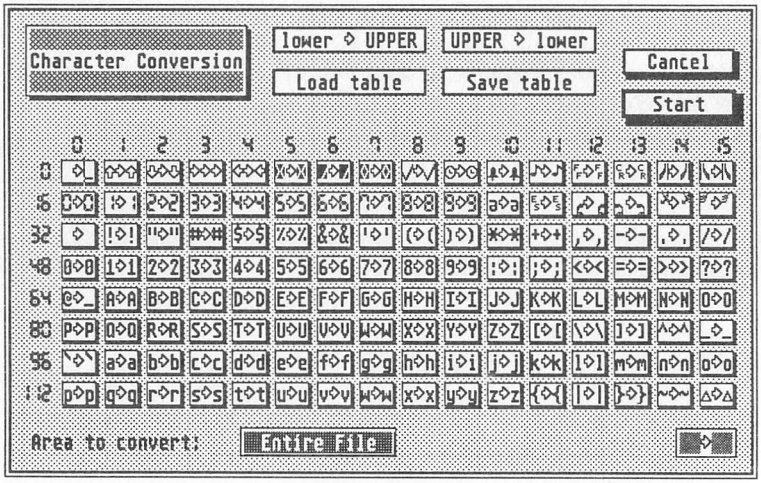
Converting Characters

This command allows you to re-define the 256 ASCII characters. A practical application of this command is conversion of upper to lowercase letters and vice versa.

Convert Characters (i_value = 16452)

- select Character conversion... in the Text menu
- use the keyboard shortcut Shift-Alt-K

The following dialog box will appear when this command is invoked:



In this dialog box you can specify the simple options of having upper to lower case conversion and vice-versa, or you can edit the conversion filter by hand on a letter-by-letter basis. Conversion tables can be loaded and saved. Only half of one table is visible at a time, i.e. only 128 characters are displayed at once. You can see the other 128 characters in a table by clicking on the button in the bottom right corner of the dialog box.

Each button represents one character. Each button can thus be edited to specify which character a character should be replaced with. The leftmost of the two characters (not counting the arrow) is the 'search' character, while the character on the right of the arrow is the 'replace' character.

You can specify whether the entire text should be converted, or only the currently-selected block.

Beware: the entire table is used during the conversion. If you want to convert only one character, make very sure that the table reflects this.

The Load and Save table commands enable you to load and save entire conversion tables. Tempus contains the upper- to lower- and lower- to upper-case conversions internally. Selecting the respective buttons will cause pre-defined table to be put into place.

Double-clicking on the title of the dialog box, Character conversion, causes the standard table to be used. The standard table is set so that each character is replaced by itself. This make the construction of a conversion table to change only one character much easier.

F1	lower → UPPER
F2	UPPER → lower
Alt-L	Load table
Alt-S	Save table
Alt-G	Whole text
Alt-B	Block area
Control-→	Next page
Undo	Cancel
Return	Start
Enter	Start

Comparing Files

This command will compare the contents of all files that have open windows. Tempus will then display the differences.

The comparison begins at the current cursor position and goes toward the end of the text. If differences between any files are found Tempus will stop and position the cursor at the beginning of the differing area. If no differences were found, the cursors are positioned at the end of the files.

Ends of lines are not used in the comparison, only the sequence of characters matters.

Note: To continue comparing after a difference has already been found, the cursors of the files must all be positioned after the different area of text. This is not the same as in the search again feature.

Compare Files (i_value = 16456)

- select Compare files in the Text menu
- use the keyboard shortcut Shift-Alt-V

Removing Unnecessary Characters

This command removes certain irrelevant characters from the ends of lines. The characters removed are:

-ASCII 0
-ASCII 8
-CR (ASCII 13)
-Space (ASCII 32)

This command can be use to turn word-wrapped text into 'source' type text. All the characters that are needed in word wrap mode are unnecessary in source mode.

Convert from Wrap (i_value = 16460)

- select Convert from wrap in the Text menu
- use the keyboard shortcut Shift-Alt-E

Converting Text to Wrap Mode

This command is useful if you would like to continue to edit text in word wrap mode that, among other things, does not contain the necessary paragraph information.

The following will be marked as ends of paragraphs:

- an empty line
- a line immediately preceding an empty line
- a line terminated by a period '.'

Since this command only provides general conversion, it is quite possible that you might have to do some additional manual conversion.

Convert to Wrap (i_value = 16462)

- select Convert to wrap in the Text menu
- use the keyboard shortcut Shift-Alt-A

Note: This command can only be executed when in word wrap mode.

Reformatting Text Areas

Not all commands that can alter text in word wrap mode always reformat it accordingly. The following commands address this problem.

Reformat Text

This command reformats the whole of the text.

Reformat Text (i_value = 16464)

- select Reformat text in the Text menu
- use the keyboard shortcut Shift-Alt-R

Note: This command is accessible only in word wrap mode.

Reformat Paragraph

This command is identical to the previous one except that it reformats only one paragraph. A paragraph is defined as the area of text between the two CR characters containing the cursor. The position of the cursor within this area is irrelevant.

Reformat Paragraph (i_value = 16466)

- select Reformat Paragraph in the Text menu
- use the keyboard shortcut Shift-Alt-Return

Note: This command is accessible only in word wrap mode.

Clearing Text

This closes a file's window and removes it from memory. You should save the file before using this command.

Clear Text (i_value = 16468)

- select Clear text in the Text menu
- use the keyboard shortcut Shift-Alt-Delete
- drag the text's icon into the Trash

If you have inadvertently deleted a file from memory, you can undo the action by dragging the Trash icon back to the file's icon or by pressing the Undo key. This is only possible immediately after the mistake has occurred.

It is wise to save your textfile before using Clear text since Tempus will not warn you if you have made any changes to the text.

Undo

Some Tempus commands can be undone with the Undo key. This can only happen immediately after the command in question has been executed. The following are the commands which are undo-able.

Line Editing

Tempus retains each line in a special buffer until you have started editing another line. If you have edited a line and decide that you have made a mistake, pressing Undo before going on to another line will restore the contents of the line.

If the undo is successful, a dialog box will appear telling you which line was restored. If you press Shift-Undo, the dialog box will not appear. You can switch back and forth between the older and newer versions of the line by pressing Undo (or Shift-Undo) again.

Deleting a Line

If you have deleted a line, e.g. with F8, you can undelete it with Undo. Shift-Undo has the effect of not putting up a dialog box after the undelete. You can switch back and forth between the deleted and undeleted line by pressing Undo (or Shift-Undo) repeatedly.

Deleting a Block

A deleted block can be undeleted. A dialog box will not be displayed.

Clearing Text

If you have just cleared an entire file, dragging the Trash icon to a text icon or pressing Undo will restore the text. A dialog box will not be displayed, nor will a window automatically be opened for the restored text.

Undo (i_value = 16590)

- press the Undo key

Undo without Dialog (i_value = 16592)

- press Shift-Undo

Structure Check

This command will perform a check throughout a file to see whether there are any unbalanced open or close parentheses. You can also choose to use a different string rather than parentheses. Pascal programmers can check for balanced BEGIN and END statements, C programmers can check for { and } etc.

The parameters for the structure test are entered in a form similar to that used with the Search and Replace command.

Structure Check (i_value = 16476)

- select Structure Chk... in the Special menu
- use the keyboard shortcut Shift-Alt-H

The only difference between this dialog box and the Search and Replace dialog box is that you enter the open and closing strings that are to be checked for instead of the search and replace strings.

Note that you cannot use wildcards during a structure check.

The RPN Calculator

Tempus has a built-in RPN programmer's calculator. RPN means *Reverse Polish Notation.*

The calculator uses the concept of a stack to do its calculations. The stack is four 'registers' in size; they are known as X, Y, Z and T. Each register is 32 bits long.

Note: ENTER is used frequently in the following description. This ENTER refers to the button in the calculator dialog box and *not* the key on your ST's keyboard.

What is RPN?

For those of you familiar with the way Hewlett-Packard calculators function, the following description will contain nothing new.

You will notice that there is no = key on the calculator, nor are there any parentheses keys. With an RPN calculator they are totally unnecessary.

The X register is the one that you see in the display field of the calculator. When you enter a number, this number is put into the X register. When you then click on ENTER, the contents of the four registers are moved up one. The contents of X are copied to Y, the contents of Y are moved to Z, and Z's contents are moved to T. The previous contents of the T register are lost.

Example:

Entering the number 567:

	X	Y	Z	T
before	1	2	3	4
after	567	1	2	3

Click ENTER:

	X	Y	Z	T
before	567	1	2	3
after	567	567	1	2

Operations that have two operands are performed on the X and Y registers. The final result will be in the X register, and the other register's values will be moved down one, i.e. in the opposite order described above.

To execute an operation you first enter the operands and then the operator.

Example:

567*3

	X	Y	Z	T
before	1	2	3	4
567	567	1	2	3
ENTER	567	567	1	2
3	3	567	1	2
*	1701	1	2	2

The Keys on the Calculator

DEC	display numbers using the decimal base
HEX	display numbers in hex (base 16)
BIN	display numbers in binary (base 2)
OCT	display numbers in octal (base 8)
=> Text	copy the currently displayed value to the current cursor position
AND	logical AND, performed on X and Y
OR	logical OR, performed on X and Y
XOR	logical XOR (exclusive OR), performed on X and Y
NOT	produce the 1s complement of X
NEG	negate the contents of X, i.e. produce the 2s complement
+	add X and Y
-	subtract X from Y
*	multiply X and Y
/	divide Y by X
%	return Y MOD X. e.g. if Y is 14 and X is 3, the result will be 2. 14 divided by three is 4 with 2 left over. The remainder is the result of the modulus operation.
CLX	clear the contents of the X register
ENTER	move the values of the registers up to the next register, i.e. X to Y, Y to Z, Z to T. The value in T is lost.

RPN Calculator (i_value = 16542)

- select RPN Calculator in the Special menu
- use the keyboard shortcut Shift-Help

The Calculator is brought to the front, regardless of whether it was already open or not.

Quit RPN Calculator (i_value = 16716)

- Click in the Calculator's close box
- use the keyboard shortcut Control-Help

q or Q	DEC
w or W	HEX
r or R	BIN
o or O	OCT
t or T	=> Text
&	AND
|	OR
^	XOR
~	NOT
!	NEG
+	+
-	-
*	*
/	/
%	%
ESC	CLX
Return	ENTER
Enter	ENTER
0...9	digits
a...f or A...F	hex digits

If an error occurs during a calculation, Tempus will give a warning beep. An example of an error is *division by zero.*

Tab Character

After loading text that contains the tab character (ASCII 9), Tempus will not automatically convert the tab to spaces. Certain commands allow control over tab characters.

Expand Text

With this command, Tempus will replace any tab characters within the file with the number of space characters equivalent to the current tab length (see **Chapter 9** for details on how to set the tab length).

Expand Text (i_value = 16478)

- select Expand text in the Special menu
- use the keyboard shortcut Control-- (Control and the minus key)

Compress Text

This is the complement of the previous command. Tempus will replace every sequence of spaces of the current tab size with tab characters.

Beware: Do not use this command on text that already contains tab characters. Tempus cannot tell tab characters from spaces; it is highly probable that your text would end up looking quite different from what you expected.

Compress Text (i_value = 16480)

- select Compress text from the Special menu
- use the keyboard shortcut Alt-- (Alt and the minus key).

Character Size

If Tempus is running in monochrome mode you can select the size of the characters that it uses to display text. The settings for each of the four loaded files are independent of one another.

Tempus can display characters in either the 8x8 or 8x16 system fonts. In medium resolution, Tempus can display text only in the 8x8 font.

8x8 Text Display (i_value = 16530)

- select 8x8 in the Special menu
- use the keyboard shortcut Control-8

8x16 Text Display (i_value = 16532)

- select 8x16 in the Special menu
- use the keyboard shortcut Control-0 (the digit 0)

Fonts

Tempus normally uses the fonts provided by the system to display text. You can also load previously defined fonts from disk to be used to display text. The character set must be in DEGAS format i.e. the first data byte is the bitmap of the uppermost line of the first character; the first character is 0 not 1. The second byte represents the second line of the first characters etc. After the first character's data follows the second character's bitmap and so on. With an 8x8 font the second character begins at byte 9, with a 8x16 font the second character begins at byte 17.

Load 8x8 Font (i_value = 16492)

- select Load 8x8... in the Special menu
- use the keyboard shortcut Alt-8

Load 8x16 Font (i_value = 16494)

- select Load 8x16... in the Special menu
- use the keyboard shortcut Alt-0 (the digit 0)

Using System Font

You can revert to using the system's font with the following command.

Revert to System Font (i_value = 16490)

- select System character set in the Special menu
- use the keyboard shortcut Alt-D

Inverse Fonts

This command inverts the display from black-on-white to white-on-black or vice versa. The legibility of the 8x8 font can sometimes be enhanced by this command.

Inverse Fonts (i_value = 16488)

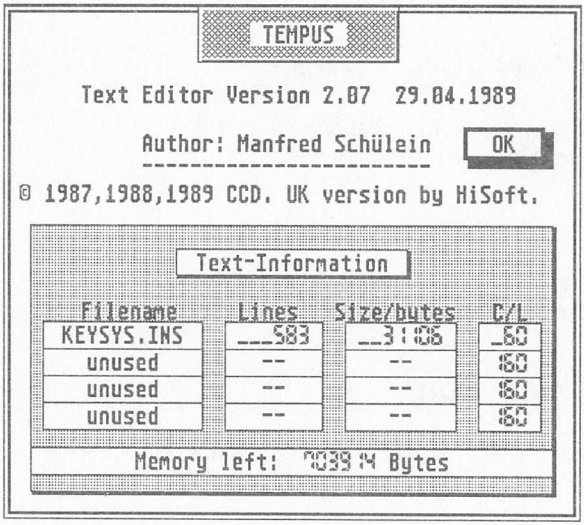
- select Inverse in the Special menu
- use the keyboard shortcut Alt-Q

Tempus Information

Tempus' About dialog box contains its copyright statement as well as information about currently loaded files and remaining memory.

About Tempus (i_value = 16534)

- select About... in the Atari menu
- use the keyboard shortcut Alt-V



The About Tempus Box

Depending on the size of the currently loaded files, it can take a while for this dialog box to appear.

The dialog box displays information for all files currently in memory. The file's names are displayed as well as the length in lines and bytes. The length in bytes is generated by adding the number of characters contained in the text to the number of lines x 4. A file's size in memory and its size on disk usually differ due to the additional information that Tempus has in memory.

The dialog box also displays the current maximum line size as well as the amount of memory remaining in the system.

Chapter 6
The Mouse Buttons

Tempus differentiates between a single- and a double-click. A single-click involves positioning the mouse pointer and pressing and releasing the button once. Double-clicking involves pressing and releasing the mouse button twice in quick succession. Of course, there are also two buttons that can be clicked.

The Left Mouse Button

The selection of menus and of buttons and fields in dialog boxes is generally performed only via the left mouse key.

General Window Commands

Clicking on any visible part of a window if it is not the frontmost window, will bring it to the front and activate it. The previously active window will be deactivated and placed 'behind' the newly activated window.

Window Commands in the Active Window

To move the active window, click on its title bar. Without letting go of the mouse button, drag the grey rectangle to the position that you would like the window to go. When you release the mouse button, the window will be moved.

To close the window, click in the window's close box at the upper left hand corner of the window (in the title bar).

You can use the zoom box in the right of the title bar to make the window as large as the screen allows. Clicking in the zoom box again will cause the window to resize to its previous size and position.

To resize the window, click on the resize box in the lower right corner of the window. Without letting go of the button, drag the rectangle to the size you want and then release the mouse button. The window will then resize.

Scroll Bars and Arrows

An active window has scroll bars on the right and bottom borders. These scroll bars are used to select the area of your text that is displayed in the window.

All commands that are executed in conjunction with the scroll bars have auto repeat functions. If you hold down the mouse in any one of the relevant areas long enough, Tempus will continue executing the command until you release the mouse button.

The Vertical Scroll Bar

The vertical scroll bar is on the right border of the window. It determines which lines of your text are displayed. The actual scroll bar is the white rectangle in the grey scroll area. The scroll bar's size relative to the scroll has the same ratio as the amount of lines displayed in the window relative to the total number of lines in your file.

Clicking on either the arrow pointing up or the arrow pointing down, will cause your text to scroll down and up by one line respectively. Clicking in the grey scroll area between the arrows and the scroll bar will cause your text to scroll up or down one page at a time.

You can also drag the scroll bar to any position within the scroll area rather than using the arrows or clicking in the scroll area.

Keyboard shortcuts for the vertical scroll bar involve using the cursor keys and have already been discussed in **Chapter 2**.

The Horizontal Scroll Bar

The horizontal scroll bar is identical to the vertical scroll bar except that it affects the columns of text that are visible in the window.

All of the scroll bar commands can also be executed from the keyboard.

Scroll right one page (i_value 16558)

Shift-Alt-Numeric 5

Scroll left one page (i_value 16560)

Shift-Alt-Numeric 6

Scroll right one column (i_value 16562)

Shift-Alt-Numeric 4

Scroll left one column (i_value 16564)

Shift-Alt-Numeric +

Window Commands within the Current Window

You can place the cursor on a particular spot in the window by clicking where you would like the cursor to be. Be aware that you cannot click on an area of the window outside of the maximum line length.

You can also define the block's start by left-double-clicking on the character that is to be the first in the block.

Icon Commands

Some of Tempus' commands can be executed through the use of its desktop icons.

Selecting an icon is merely a matter of clicking on any visible part of it and not releasing the mouse button. The icon will be shown inverted and surrounded by a grey rectangle. You can drag the icon as long as the mouse button remains pressed.

Generally, icon commands involve dragging one icon over another. This is accomplished as described in the previous paragraph.

The following is a list of commands that can be executed with icons. When an icon command is executed, its name is briefly displayed in the menu bar.

Icon to	Icon	Command
Text ->	Disk	Save With Backup
Text ->	Printer	Print Text
Text ->	Trash	Clear text
Block ->	Text	Move block
Block ->	Disk	Save Block
Block ->	Printer	Print block
Block ->	Trash	Delete block
Disk ->	unused Text	Open File
Disk ->	Text	Append text
Disk ->	Trash	Delete File
Trash ->	eliminated Text	Reload Text

You can open a text's window by double-clicking on its icon.

The Right Mouse Button

Window Commands in the Current Window

Clicking in the title bar with the right mouse button causes the display mode of the window information to change. The four modes cycle through:

- line, column, page number, name and path of the file
- only the path and the name
- only line column and page information
- none of the above

The setting is part of the **Basic Parameters**.

End of Block

Double-clicking on a character with the right mouse button marks the character before it as the end of the block.

Window Commands in any Window

These commands are not restricted to the current window.

If a window contains text in the format generated by the cross-reference command, you can use the right mouse button to jump to the referenced text. Place the mouse pointer over the reference and click. While the right mouse button is held down, the reference is inverted. When you let go of the mouse button, Tempus jumps to the position specified by the reference.

You can also use the right mouse button to specify a selection of text as the search string. To do this, place the mouse pointer over the first character of the string. Hold down the Shift key. Press the right mouse button and drag the mouse pointer to the end of the text you would like to use as the search string. While you are dragging, the text is shown inverted. When you have selected the text, release the mouse button and the Shift key.

If you release the Shift key *before* the right mouse button, the text that had been selected until then is de-selected. Selections that span more than one line are not possible.

Pressing both Mouse Buttons

Pressing both mouse buttons will:

- Abort an executing macro
- Abort the Save and Quit command; the file is saved, but Tempus will not quit
- Abort Search and Replace
- Abort printing

Chapter 7
Text Windows

Each of the up to four files in memory has its own text window.

Using Text Windows via the Keyboard

You can execute most commands that affect a text window from the keyboard as well as by using your mouse. All the keyboard commands for text windows involve the top four keys in the numeric keypad (to the right of the main ST keyboard).

Bringing Text Windows to the Front

These commands bring one of the four text windows to the front. For these commands to work, the relevant file must be loaded. If a text window is closed, it will be opened with this command.

Window 1 to Front (i_value = 16700)

Control-Numeric (

Brings text window #1 to the front and opens it if necessary.

Window 2 to Front (i_value = 16702)

Control-Numeric)

Brings text window #2 to the front and opens it if necessary.

Window 3 to Front (i_value = 16704)

Control-Numeric /

Brings text window #3 to the front and opens it if necessary.

Window 4 to Front (i_value = 16706)

Control-Numeric *

Brings text window #4 to the front and opens it if necessary.

Close Text Window

The following commands close the respective text window.

Close Window 1 (i_value = 16692)

Alt-Numeric (

Closes text window #1

Close Window 2 (i_value = 16694)

Alt-Numeric)

Closes text window #2

Close Window 3 (i_value = 16696)

Alt-Numeric /

Closes text window #3

Close Window 4 (i_value = 16698)

Alt-Numeric *

Closes text window #4

Zooming Windows

The following commands zoom a text window to maximum size or return it to its previous size and position.

Zoom Window 1 (i_value = 16708)

Shift-Alt-Numeric (

Zooms/unzooms text window #1

Zoom Window 2 (i_value = 16710)

Shift-Alt-Numeric)

Zooms/unzooms text window #2

Zoom Window 3 (i_value = 16712)

Shift-Alt-Numeric /

Zooms/unzooms text window #3

Zoom Window 4 (i_value = 16714)

Shift-Alt-Numeric *

Zooms/unzooms text window #4

Window Tiling and Stacking

In many cases it is very useful to be able to see the contents of more than one window at a time. Tempus has the ability to organise several different windows in three ways.

Stacking Windows

This command will display all open windows in such a way that at least a portion of each window is visible. This enables you to select one of the available windows easily with the mouse.

Stack Windows (i_value = 16482)

- select ...stacked in the Special menu
- use the keyboard shortcut Control-, (the comma key)

Tile Windows Horizontally

This command places all open windows next to each other on screen. They are each of the same screen height, the screen width is divided between the number of open windows.

Tile Windows Horizontally (i_value = 16484)

- select ...tiled across in the Special menu
- use the keyboard shortcut Control-. (Control and a full stop)

Tile Windows Vertically

All open windows are positioned to have the full width of the screen. The height of the screen is divided by the number of open windows.

Tile Windows Vertically (i_value = 16486)

- select ...tiled vertically in the Special menu
- use the keyboard shortcut Control-- (Control-Minus)

Installing Window Sizes and Positions

The positions and sizes of the four text windows can be saved as part of the **Text Windows** parameters. If a new file is loaded, its window's size and position is determined by the values saved previously (if there are none, Tempus uses defaults). If a text window was closed when the parameters were saved, it is saved as closed. This means that when a file is loaded into this window, the window will not be automatically opened.

Chapter 8
Starting and Quitting Tempus

Starting Tempus from Other Programs

You can start Tempus from any GEM-based environment; you cannot start Tempus from command line shells that only support TOS.

When starting Tempus, the names of up to four text files can be placed in the command line. These files will be loaded automatically.

In addition to the file name, you can append the position that the cursor is to be after each file is loaded. The number entered should be the line number that you would like the cursor to be on. You can also specify a column number; if it this is left out, the cursor will be placed at the beginning of the line. The positions should be ASCII decimal numbers.

Spaces, commas and tab characters may be used to separate entries in the command line.

An example of a command line is:

a:text.doc,b:\text2.txt 45 c:\folder\letter 22 10

This causes a:\text.doc to be loaded, b:\text2.txt to be loaded and the cursor put at the beginning of line 45 and c:\folder\letter to be loaded with the cursor positioned on line 22 in column 10.

Starting Other Programs from Tempus

You can start other programs from within Tempus. There are two ways of doing this.

Start Program After Quitting

This command causes the specified program to launch immediately after you quit Tempus. Any necessary parameters can be entered in the command's dialog box.

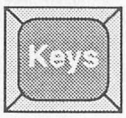
Set Program Launch Parameters (i_value = 16548)

- select Set parameters... in the Parameters menu
- use the keyboard shortcut Shift-Alt-O

The first editable text field lets you specify the exact path of the program that is to be launched (or run). The second field enables you to enter the command line (if any) that is passed to the program.

There are also two groups of buttons to set: the first group is used to specify whether the program uses graphics and whether the program is a GEM program or not.

The two buttons at the bottom are Disable and Enable. The auto launch after Tempus quitting can be disabled with the first button, whereas the second enables the program specified by the settings to be started when Tempus finishes. The parameters that are set in this dialog box are part of the **Basic Parameters**.



F1	Graphics - Yes
Shift-F1	Graphics - No
F2	Gem - Yes
Shift-F2	Gem - No
Undo	Disable
Return	Enable
Enter	Enable

Immediate Program Launch

When executing this command, a file selector dialog box comes up; you should select the program that you would like to launch. When you have done this, another dialog box will appear enabling you to specify a command line that is to be passed to the program. When you have finished the second dialog box, the program is launched.

After the launched program has finished, control will return to Tempus just as you left it.

Launch Program Immediately (i_value = 16550)

- select Immediately... in the Parameters menu
- use the keyboard shortcut Shift-Alt-P

Quitting Tempus

There are several different ways to quit Tempus.

Quit and Verify Save

If you have changed your text since it was last saved and want to quit, this command will ask you first whether you would like to save the changes that were made since the last save.

Quit with Verify (i_value = 16540)

- select Quit TEMPUS in the File menu
- use the keyboard shortcut Control-X

If there has been no change to any of the currently open files since the last save of each file, Tempus will not put up a dialog box.

The dialog box displayed by this command shows the files that are loaded. The names of those files that have not been saved are selectable with the mouse. If a file name has a check mark next to it, this name will be used when you hit the Save button at the bottom of the dialog box. This goes for any relevant backup files as well.

Selecting the Cancel button will return you to Tempus without any of the files being saved. Selecting the Leave button will cause Tempus to quit without saving any of the files in the dialog box.

Alt-1	Select file 1
Alt-2	Select file 2
Alt-3	Select file 3
Alt-4	Select file 4
Alt-5	Flip BAK on file 1
Alt-6	Flip BAK on file 2
Alt-7	Flip BAK on file 3
Alt-8	Flip BAK on file 4
Undo	Cancel
Control-X	Abandon
Return	Save
Enter	Save

Quit and Save

The following two commands will quit Tempus and save the current file. Any other files in memory, regardless of whether they might not have been saved recently, are not saved.

If you have started one of the following commands, you can abort them by pressing both mouse buttons simultaneously. Owing to the fact that the buttons are checked only after the file is saved, you might have to keep the mouse buttons pressed for some time before Tempus reacts.

Quit and Save with Backup

These commands cause the current text to be saved with a backup (as described above for the command **Save with Backup**). The only difference between the four types of this command is the return value that Tempus passes to the program that originally launched it.

The following commands can only be accessed via the keyboard.

Key Sequence	i_value	Return Value
Control-Numeric 0	16662	0
Control-Numeric 1	16664	1
Control-Numeric 2	16666	2
Control-Numeric 3	16668	3

Quit and Save without Backup

This command is identical to the previous one, except that it does not support the backup file. These commands can also only be accessed via the keyboard.

Key Sequence	i_value	Return Value
Shift-Alt-Numeric 0	16654	0
Shift-Alt-Numeric 1	16656	1
Shift-Alt-Numeric 2	16658	2
Shift-Alt-Numeric 3	16660	3

Chapter 9 Settings and Parameters

Settings

Setting Line Length

You can set the maximum line length by using the Set Line Length command. A dialog box will appear, prompting you to enter a number from 20 to 255. Hitting Return or Enter quits the dialog box. If no number is entered (i.e. the editable field is empty) the old value is retained.

When reducing the maximum line length, all lines in the text will be checked to see if they will fit. If not, a dialog box similar to the one described in **Chapter 3 Loading Files**, appears, giving you the option to truncate or wrap the lines; you can also abort the command.

The maximum line length value pertains to only one file at once.

Set Line Length (i_value = 16496)

- select Line length in the Parameters menu
- use the keyboard shortcut Control-= (Control and equals)

The current line length for this file is displayed next to its menu item.

Setting Page Length

The procedure for setting a file's page length is similar to that of setting its line length, described above. A dialog box is displayed, prompting you to enter the number of lines per page. This setting is used only when printing.

The value applies to all files that are loaded and is part of the **Basic Parameters**.

Set Page Length (i_value = 16498)

- select Page length in the Parameters menu
- use the keyboard shortcut Control-` (Control and backward quote)

The current page length is displayed next to its menu item.

Set Paging Factor

The paging factor is used to determine the uppermost line in the window after you page up or down. The formula to determine the line is the following:

For paging down:

number of new topmost line

= line number of the bottommost line
+ number of lines visible in window
+ paging factor

For paging up:

number of new topmost line

= line number of the topmost line
- number of lines visible in window
- paging factor

For example, setting -1 to be the paging factor allows the bottommost line displayed in the window to become the topmost when paging down.

The paging factor is normally set to zero. To set the paging factor, use the **Set Paging Factor** command

Set Paging Factor (i_value = 16500)

- select Paging in the Parameters menu
- use the keyboard shortcut Alt-U

Set Tab Width

This command presents a dialog box in which you can enter the desired tab width. The value may range from 1 to 99. Hitting Return or Enter ends the dialog box. If no value is entered, the previous tab width is retained.

Each of the four files can have a different tab width. The values are part of the **Basic Parameters**.

Set Tab Width (i_value = 16502)

- select Tab width in the Parameters menu
- use the keyboard shortcut Alt-N

Enable/Disable Time Display

Tempus can continuously display the current system time on the top right of the menu bar. The keyboard shortcut Alt-= toggles the display on or off. The setting is part of the **Basic Parameters**.

Toggle Time Display (i_value = 16652)

- use the keyboard shortcut Alt-=

Enable-Disable Grow/Shrink Boxes

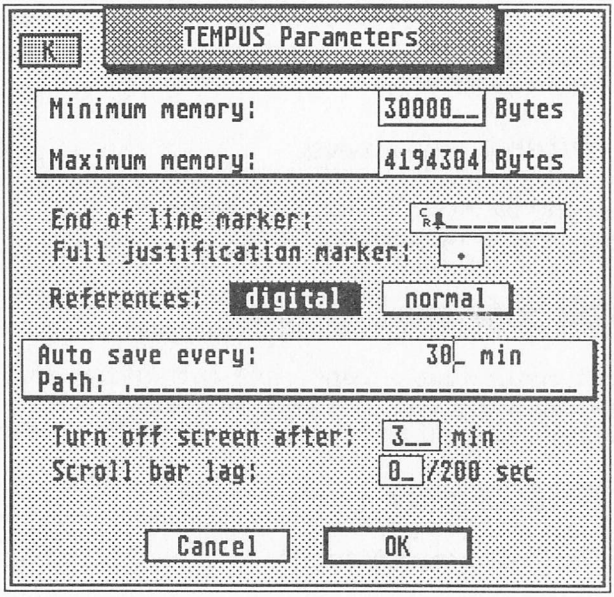
This command toggles Tempus' display of growing and shrinking boxes whenever a dialog box is opened or closed. Although this display is purely cosmetic, having this setting disabled will result in faster opening and closing of the boxes.

Toggle Grow/Shrink Boxes (i_value = 16682)

- use the keyboard shortcut Control-Numeric 7

Setting Tempus' Parameters

Some of Tempus's setting that are altered infrequently are grouped together in the following dialog box.



Set Program Parameters (i_value = 16546)

- select Set parameters... in the Parameters menu
- use the keyboard shortcut Shift-Alt-T

The following are descriptions of the settings contained in the dialog box.

Memory Requirements

In some cases it is beneficial for Tempus not to use up all available memory. This can be accomplished by setting the values for the maximum and minimum amount of memory that Tempus allocates.

Maximum Memory

Tempus will attempt to allocate an amount of memory that is as close as possible to this value. If there is more memory available, Tempus will only allocate the set maximum. If the available memory is less than the maximum, Tempus will allocate all of it.

Minimum Memory

This value determines how much memory Tempus leaves the operating system. If the value you enter is not possible, Tempus will quit with a warning.

Be very careful if you experiment with this value; if you set it too high, you will not be able to edit it, since Tempus will immediately terminate.

A recommended *minimum* value is around 30000 bytes. Any less than this and the operating system may not have enough memory for standard housekeeping tasks.

The setting for minimum system memory has priority over Tempus' maximum memory allocation.

If changed, these settings take effect the next time you run Tempus.

End Of Line Marker

This setting determines the string used to mark the end of a line. The default setting is CR LF ($0D and $0A).

Full Justification Marker

Determines the character used to pad a line to its maximum length in full-justified word-wrap mode. The default setting is ASCII 250.

Digit Type

This setting determines whether numbers such as the page/line number display in the title bar of every window are displayed in a digital font or not. Some commands such as cross-reference generation have separate digital/system font settings.

Screen Saving

Tempus has a built-in screen saver that will turn your screen to black after a specified period of time has elapsed without a key being pressed or the mouse being moved. This can save your monitor's CRT from unnecessary burn-in.

When the screen is blanked, moving the mouse or pressing a key will reactivate the screen.

The time before Tempus blanks the screen is selectable between 1 and 999 minutes. Setting the lag to 0 disables screen saving.

Auto Saving

If you are editing a particular file for a long period of time, Auto Save ensures that the text is saved regularly. This way, if there is a power failure or your ST crashes, all your work will not have been in vain.

The time interval can be set to a value between 1 and 999 minutes. As with screen saving, setting this value to 0 will disable Auto Save completely.

Scroll Bar Lag

You can set a deliberate lag for the scroll bars in order to slow down screen scrolling to a rate where the text onscreen becomes legible as you scroll. The setting determines the lag in 200ths of a second between two scrolling operations. The value can be set in the range of 0 to 99 200ths.

Control-D	Digital
Control-N	Normal
Undo	Cancel
Return	Ok
Enter	Ok

Changing the Keyboard Layout

Keyboard Layout

There are four different ways of defining key combinations.

Character

The simplest definition is that of a single *character*. When the key combination is pressed, the single character is entered into the current text. For instance, all of the letter keys are defined as character keys.

Command

A key combination can also be defined to execute a particular *command* when pressed. The Backspace key, for instance, is defined in precisely this manner.

Alias

By defining an alias, you can cause a key combination to have the same effect as another *previously-defined* one. If the previously-defined one is altered, pressing the alias will execute the altered definition.

Macros

If a key combination is defined as having a sequence of things to perform, the definition becomes a macro definition.

The first three ways of re-defining the keyboard will be discussed later. Macros are detailed now.

Macros

Within a macro definition you may nest other macro definitions, up to 16 levels deep, and use aliases. Macros may not be recursive, i.e. a macro may not call itself during its execution.

Macro Recording

Since it would be unnecessarily complicated to have to define macros by altering Tempus' keyboard settings, Tempus offers a macro recorder. When enabled, Tempus 'watches' the keys that you type and remembers the sequence that they were typed in. When you turn recording mode off, the macro is defined.

Tempus offers two different recording modes since it can, at times, be irritating to actually execute the commands that are part of the macro.

Record with Echo

Using this record mode will actually execute the commands that are part of the macro as they are recorded.

Toggle Record with Echo on/off (i_value = 16672)

- use the keyboard shortcut Control-Esc

While Tempus is recording a macro with echo, a lower case e is displayed on the left side of the time display.

Record without Echo

If a macro contains a command that exits Tempus, you probably do not want the command to be executed while the macro is being recorded. For this purpose, **Record without Echo** is implemented. It will record the keystrokes of the macro without actually executing the commands associated with the recorded keystrokes.

Toggle Record without Echo on/off (i_value = 16670)

- use the keyboard shortcut Alt-Esc

While Tempus is recording a macro without echo, a lower case o is displayed on the left side of the time display.

After you have toggled record mode off, Tempus will wait for the next key combination. This combination is the one that will subsequently cause the macro to execute. While Tempus is waiting for the macro invocation key, a lower case m is displayed to the left of the time display.

Macros that are defined in one editing session may not have their data larger than approx. 1000 bytes. If the macros that you define should go over this limit, an error message will warn you; you must then quit Tempus and restart it.

Executing a Macro

After having defined a macro, you can execute it by pressing the appropriate key combination. To abort a macro that is executing, press both mouse buttons simultaneously.

If an executing macro tries to go beyond the maximum 16 levels of macro nesting, an error message will appear. The macro will be aborted.

Macro Definition Example

In this example Shift-F1 will be defined as Shift-→, Backspace and ↓. In defining this macro, **Record with Echo** will be used to display the effects of the different keystrokes.

The following sequence describes the steps necessary in the definition of the macro.

Alt-Esc	Toggle **Record with Echo** on; an e appears next to the time display.
Shift-→	First keystroke of the macro; cursor goes to the end of the line.
Backspace	Second keystroke of the macro. The last character on the line is deleted.
↓	Third keystroke of the macro. The cursor moves down one line.
Alt-Esc	Toggle **Record with Echo** off. The e disappears and is replaced by an m. This indicates that Tempus is waiting for the key combination with which the macro is to be called.
Shift-F1	The macro definition is finished; the key combination that is associated with the macro is Shift-F1. The m disappears from the time display.

Every subsequent Shift-F1 will cause the last character of the current line to be deleted and the cursor to be moved down one line.

The following eight keys, if used in combination with Alt or Shift-Alt, cannot be used to call macros due to limitations in the operating system :

Help, ↑, ←, →, ↓, Insert, Clr, Home

Unused key combinations can be found in KEYSYS.INS. Those combinations that have a value of zero are still free.

Function Keys

The keys F1 to F10 are commonly described as *function keys*. Tempus has *predefined* the meaning of the unmodified function keys (i.e. when no modifier keys (Shift, Alt, Control) are pressed in combination with the function keys) but lets you define text to be inserted in the current window if the function key is pressed in conjunction with Alt or Shift.

The function keys are also displayed iconically in three rows on Tempus' desktop. The topmost row is the Alt row, the middle one the Shift row and the bottom one the 'unmodified' row. The predefined function keys can only be changed by assigning macros to them.

The keys in the upper two rows can be defined to 'contain' text that will be inserted at the current cursor position if the keys are pressed (or the icon is clicked on).

The following descriptions apply only to the Alt and Shift rows of function keys.

Defining Function Keys

To define a function key, use the following command:

Define Function key (i_value = 16544)

-select Function Keys... from the Parameters menu
- use the keyboard shortcut Alt-F

Each function key can have text up to 188 characters in length associated with it. The text is displayed as four lines of 47 characters each in the dialog box. This distribution of lines is solely to make the text fit on screen; it is probably better to think of the four lines as side by side. This means that text that is on separate lines in the dialog box is not automatically entered on separate lines in the editing window.

To force a separate line, a carriage return character must be inserted while defining the text. This can be done by using the key combination Control-M.

To define the function key that is to be used click on the appropriate button at the top of the dialog box.

Each key can have an abbreviation of up to 9 characters assigned to it. This abbreviation is displayed in the icon on Tempus' desktop.

The text associated with function keys is part of the **Function Keys** settings.

Alt-S	Shift
Alt-A	Alternate
F1	F1
F2	F2
F3	F3
F4	F4
F5	F5
F6	F6
F7	F7
F8	F8
F9	F9
F10	F10
Return	Done
Enter	Done

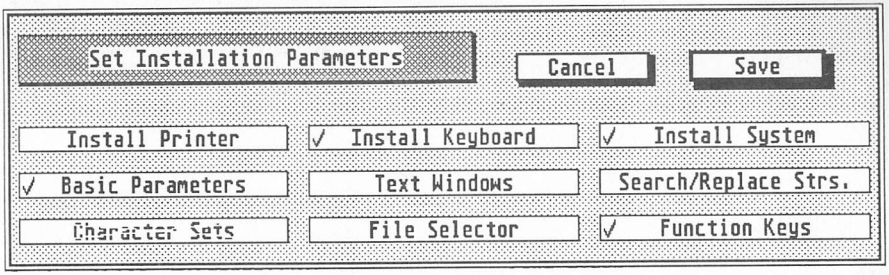
Chapter 10
Changing the Settings

Tempus can easily be configured to tailor the editing environment to your needs. So that you do not have to reconfigure Tempus every time that it is run, most of Tempus' settings can be saved.

The settings are saved within the TEMPUS .PRG file; this differs from previous version of Tempus where the settings were saved in a separate file. Because of this, the size of Tempus may change, as will the modification date.

The Different Types of Settings

Tempus' settings are grouped in several different types which are displayed in the Save Settings... dialog box (on the Parameters menu). When executing this command, you must first select the settings that are to be saved. The selection is made in the dialog box that appears.



Each of the buttons in the dialog box represent a type of setting. The buttons can be in one of several states:

Checked

When you click on the Save button to leave the dialog box, any setting that is checked will be saved.

Crossed Out

When you click on the Save button to leave the dialog box, any setting that is crossed out will not be saved. If some settings have been saved previously, they are deleted. There are some items, such as the Basic Settings, that cannot be crossed out.

Plain

If a button is neither checked nor crossed out and you click on the Save button to exit the dialog box, the previously saved settings are unaltered.

Select and Save Settings (i_value = 16552)

- select Save settings... in the Parameters menu
- use the keyboard shortcut Alt-J

Alt-D	Install Printer
Alt-T	Install Keyboard
Alt-S	Install System
Alt-G	Basic Parameters
Alt-F	Text Windows
Alt-Y	Search/Replace Strings
Alt-C	Character Sets
Alt-V	File Selector
Alt-B	Function Keys
Undo	Cancel
Return	Save
Enter	Save

The Different Groups of Settings

The following attributes are saved whenever the corresponding box in the Save Settings dialog box is checked.

File Selector Settings

- the 10 definable search masks
- the path
- the filename

Text Window Settings

- the size and position of the 4 windows

Basic Parameters

- Minimum system memory
- Maximum memory allocation
- EOL character
- Screen save time
- Auto save time
- Full justification character
- Number type (digital/normal)
- Wildcards
- First and last search column
- First and last sort column
- Scroll delay
- Title bar display state
- Grow and shrink boxes
- Settings to run other programs
- Page length
- Colours
- Icon positions
- Paging factor
- Maximum line length
- Insert/Overwrite mode state
- Cursor positioning
- Character size
- Tab spacing
- Line-clamp mode
- Edit mode (Source mode vs Word Wrap mode)
- Justification mode (left/full)
- Auto indent state

System, Keyboard & Printer Settings

The System, Printer and Keyboard Settings have to be 'compiled' by Tempus. The source format for these settings follows.

Source Format

The System, Keyboard and Printer settings are contained in two files (KEYSYS.INS and PRINT.INS) and each file is simply ASCII text arranged in a particular format.

Each line in these installation files can be a *Comment*, an *Installation Line* or a blank line. Every line is terminated with Return or Enter.

Comments

A comment consists of an asterisk (*), followed by the text of the comment e.g.

* The following are the Keyboard Definitions

Installation Lines

An Installation Line consists of a *Type Specifier*, followed by an *Assignment Operator* (:=), followed by the *Assignment Value*.

A Type Specifier can be a *Keyboard Specifier*, a *System Specifier* or a *Printer Specifier*.

A Keyboard Specifier is a letter T (or t) immediately followed by a *Key Number* (see **Appendix A** for key numbers).

A System Specifier is a letter S (or s) immediately followed by a *System Number* (see below for the system numbers).

A Printer Specifier is either a *Character Value* or a *Reserved Word* (see below for the printer reserved words). A Character Value is either a character enclosed in single- or double- quotes or an ASCII value.

The meaning of an Assignment Value depends on the context: for a Keyboard installation it can be a two character string, a key number or an i_value (see **Keyboard Settings** below for more detail). For a System installation the Assignment Value is generally a null-terminated string (see **System Settings** below). For a Printer installation the Assignment Value is a number of characters or numbers (see **Printer Settings** below for detail).

Every installation line may be followed by a comment, if desired.

Examples of installation lines follow in the relevant sub-sections.

Compiling Settings

To make Tempus 'compile' the source format described above, use the Compile Settings command. This is the only way to set the Printer Settings, the Keyboard Settings, and the System Settings.

When executing this command, the source to be compiled must be in the current window.

Compile Settings (i_value = 16504)

- select Compile settings in the Parameters menu
- use the keyboard shortcut Control-J

The file KEYSYS.INS on the Tempus disk contains the standard settings for the System and Keyboard settings while PRINT.INS contains the Printer Settings.

Error Messages

If Tempus finds errors in the source during compilation, it will put up an error message. The cursor will be placed in the general vicinity of the offending source line. After correction, you must start the 'compilation' process again.

Syntax Error

If Tempus finds a syntactical error it will display an alert box with the message Syntax Error.

Settings Too Large

This error message can arise in two ways.

a) the resulting settings are greater in size than 30000 bytes, Tempus' limit.

b) the resulting settings are more than 1000 bytes larger than when Tempus was started. If this is the case, you must quit Tempus, restart and then recompile the settings. The total size of the settings may not grow by more than 1000 bytes at a time.

Numbers Too Large

This message will appear when a byte quantity is found to be larger than 255 or a word quantity is found to be greater than 65535.

Printer Driver Error

If the same character or keyword is defined twice within the printer settings, Tempus will put up an alert with the message Multiple Definition.

Keyboard Settings

Although you can alter most of Tempus' keyboard layout by using the macro functions, some alterations can only be made through Keyboard Settings.

Each key sequence can be defined as a 16-bit value. To redefine a key's effect, you must know its original value. To find a key's original value or Key Number, please use the table in **Appendix A.**

Each key definition must be started with a T character. Each key can have one or more 16-bit values associated with it. If it has more than one, then the values constitute a macro definition.

You can define a keypress to have 3 possible results:

Returning a character

To define a key to return a character, the first byte of the assignment value must always be a space character, the second byte is the actual character.

For example: You can assign the character A to the key combination Control-F1 (keyboard offset 1):

- by using a 16-bit value: T1 := $2041
- or by using a string: T1 := ' A'

Note: Return is defined as $200D and not via a i_value.

Returning a command

If defining a keyboard shortcut for a command, instead of entering a string, you enter the command's *i_value*. Each entry in this manual that defines a command also defines the command's i_value.

For example: Define Shift-M (keyboard offset: 60+270=330) to execute **Block Move** (i_value is 16392):

T330 := 16392 * **Block Move** command

Returning an alias

You can define one key to return another key's offset.

For example: Shift-Esc (keyboard offset: 11+270=281) is defined to do the same thing as the Help key (key offset: 65+450=515) by.

T281 := 515

A macro is defined when two or more values are defined to a key.

To define a macro, assign the i_values of the commands to the keyboard offset of the key that you want to use to execute the macro.

If, in the process of defining macros, more than 1000 bytes worth of macros are added, Tempus will display an error message. The size of all macros in total may also not be larger than 2000 bytes. If the macro data becomes larger than this, an error message will also appear.

The keyboard layout is a settings group and can therefore be saved after it has been 'compiled'.

System Settings

Within this settings group are values that cannot be altered otherwise. The strings displayed in the function key icons are part of the **System Settings**.

Changing the System Settings should be done with great care since the only checks made on the values are range checks of the numbers.

The following is a list of legitimate System Numbers. Theses are used in the System Settings, like the key numbers are used with the Keyboard settings.

0	F1 Icon text in double quotes, null terminated
10	F2 Icon text in double quotes, null terminated
20	F3 Icon text in double quotes, null terminated
30	F4 Icon text in double quotes, null terminated
40	F5 Icon text in double quotes, null terminated
50	F6 Icon text in double quotes, null terminated
60	F7 Icon text in double quotes, null terminated
70	F8 Icon text in double quotes, null terminated
80	F9 Icon text in double quotes, null terminated
90	F10 Icon text in double quotes, null terminated
101	List of delimiting characters for the Delete Word
107	command
113	
118	List is null terminated

Each System Setting begins with an S followed by a System Number. Then the value of the setting is defined.

Example: Redefine the text of the F2 icon to be Macro

```
S10 := 'Macro', 0
```

The null byte delimits the end of the entry.

Printer Settings

To print text, Tempus needs to know certain things about the printer it is printing to. The file PRINT.INS contains the source for an example printer driver.

Defined in the printer driver are, among other things, those ASCII values that need to be converted before they are sent to the printer.

Keywords

The printing process can be influenced by certain keywords. These can be defined in the printer driver. The keywords are case insensitive. The following is a list of available keywords:

PRELINE — The character sequence that is sent to the printer before every line

ENDLINE — The character sequence that is sent to the printer after every line

PRETEXT — The character sequence that is sent to the printer at the start of a print job

ENDTEXT — The character sequence that is sent to the printer after every print job

PREPAGE — The character sequence that is sent to the printer before every new page

ENDPAGE — The character sequence that is sent to the printer after every page

Note: Tempus does not automatically send a CRLF to the printer after every line. For most printers you must define CRLF as an ENDLINE sequence, i.e. ENDLINE := $d, $a.

Print Commands

The following is a description of the various printer commands available in Tempus. It is important that an appropriate printer driver is installed prior to using these commands.

Note: When printing justified text, the CR character is also sent to the printer. If you do not want this, you must redefine this character in the printer driver.

You can print either through the parallel or the serial port. Tempus determines which to use from the setting that was made in the control panel desk accessory.

Print Text

This command prints the entire current file.

Print text (i_value = 16458)

- select Print in the Text menu
- use the keyboard shortcut Control-P
- drag the Text icon to the Printer icon

Print Block

This command prints the current block.

Print Block (i_value = 16390)

- select Print block in the Block menu
- use the keyboard shortcut Alt-P
- drag the Block icon to the Printer icon

Printing to Disk

You can print to disk instead of to printer by using the Print to disk command. The file selector will appear; enter the name of the file that you wish the print output to go to.

Print to Disk

- select Print to disk... on the File menu

Aborting Printing

You can interrupt the printing process by pressing both mouse keys simultaneously. A dialog box will appear asking whether you wish to abort the print job or continue. Selecting No or hitting Return or Enter will continue the print job. Selecting the Yes button will cancel the current print job. Those characters that have already been sent to the printer cannot be cancelled and are likely to still be printed even after the print job is aborted.

Line Numbering

Tempus can also print a line number for every line printed. The line's number is printed before every line and after the data defined for PRELINE.

This command toggles line numbering on and off.

Toggle Line Numbering (i_value = 16528)

- select Print line numbers in the Parameters menu
- use the keyboard shortcut Control-; (Control and semi-colon)

If Line Numbering is on, the menu item is checked.

Chapter 11
Tempus' Data Structures

The following is a description of some of Tempus' internal data structures. This information is not necessary for day-to-day use, but is included here for completeness.

Internal ASCII Codes

There is generally no limit on the different ASCII characters that can be used within Tempus. There are exceptions:

- In editable text fields within dialog boxes, ASCII 0 may not be used as it delimits the end of the line.
- In word wrap mode, CR is used to delimit the end of a line.
- Tempus will interpret certain characters to be end-of-line delimiters when loading a file. If you create a new file in memory, you can use these characters, but, after saving and reloading, Tempus could get confused.

File Format

Tempus requires a loaded file to be ASCII.

Tempus will always load the whole of a file. An ASCII $1A (or Ctrl-Z) denoting the end of the text will be ignored. Conversely, Tempus does not save a file with a Ctrl-Z at the end.

The following characters sequences are recognised by Tempus as end of line markers:

- CR ($0D), LF ($0A)
- LF, CR
- LF

For files that are saved using Tempus, the end of line markers can be freely defined. The preset sequence is CR-LF.

Changed Vectors

The following ST Vectors are altered by Tempus

- 200Hz system ticker ($114)
- Keyboard/MIDI [6850] ($118)
- mousevec (kbdvecs)
- ikbdsys (kbdvecs)
- Mouse Movement vector (VDI)
- Button Change Vector (VDI)
- Tempus uses one VBI slot

Blitter

If a blitter is installed, Tempus will use it, if it has been enabled using the Desktop.

Other processors - 68020

Some parts of Tempus use bits 24-31 in addresses. For this reason, Tempus will not run properly on some 68020 enhanced STs.

Appendix A
The Keyboard

Keyboard Shortcuts

Within the following table, the character N preceding a number means that the number is to be found on the numeric pad e.g. Shift-N9 means: hold the Shift key down and press 9 on the numeric keypad.

Command	Keyboard Shortcut
About Tempus	Alt-V
Add text	Alt-R
Auto-indent	Alt-A
Auto-scroll	Shift-Alt-Z
Block marks, delete	Control-H F10
Block marks, swap	Alt-H
Block, copy	Alt-C
Block, copy without markers	Shift-Alt-C
Block, delete	Alt-Y
Block, move	Control-V
Block, print	Alt-P
Block, save	Control-W
Block, set end	Control-K
Block, set start	Control-B
Block, shift left	Alt-space
Block, shift right	Control-space
Bookmark, set	Control-1
Calculator	Shift-Help
Calculator, quit	Control-Help
Character set	Control-+
Clock, toggle	Alt-'
Compare files	Shift-Alt-V

Compress text	Alt--
Convert characters	Shift-Alt-K
Convert from wrap	Shift-Alt-A
Convert to wrap	Shift-Alt-E
Cross-reference	Control-Q
Cursor home	Home
Cursor mode, free	Shift-Alt-N9
Cursor mode, keep 1st-line column	Shift-Alt-N7
Cursor mode, keep in line	Shift-Alt-N8
Delete character	Delete
Delete file	Shift-Alt-D
Delete first	Shift-Backspace
Delete last	Shift-Delete
Delete left	Backspace
Delete line	Control-Y F8
Delete text	Shift-Alt-Delete
Delete to end of line	Alt-.
Delete to start of line	Alt-,
Delete word	Control-T
Expand text	Control-=
Font 8x8, load	Alt-8
Font 8x8, use	Control-8
Font 8x16, load	Alt-0
Font 8x16, use	Control-0
Font, use system	Alt-D
Full justify	Shift-Alt-F
Function keys, define	Alt-F
Goto bookmark	Alt-1
Goto bottom of file	Control-Home Alt-E
Goto end block	Alt-K
Goto last position	Control-Z
Goto line end	Shift-→
Goto line start	Shift-←
Goto line...	Alt-Z

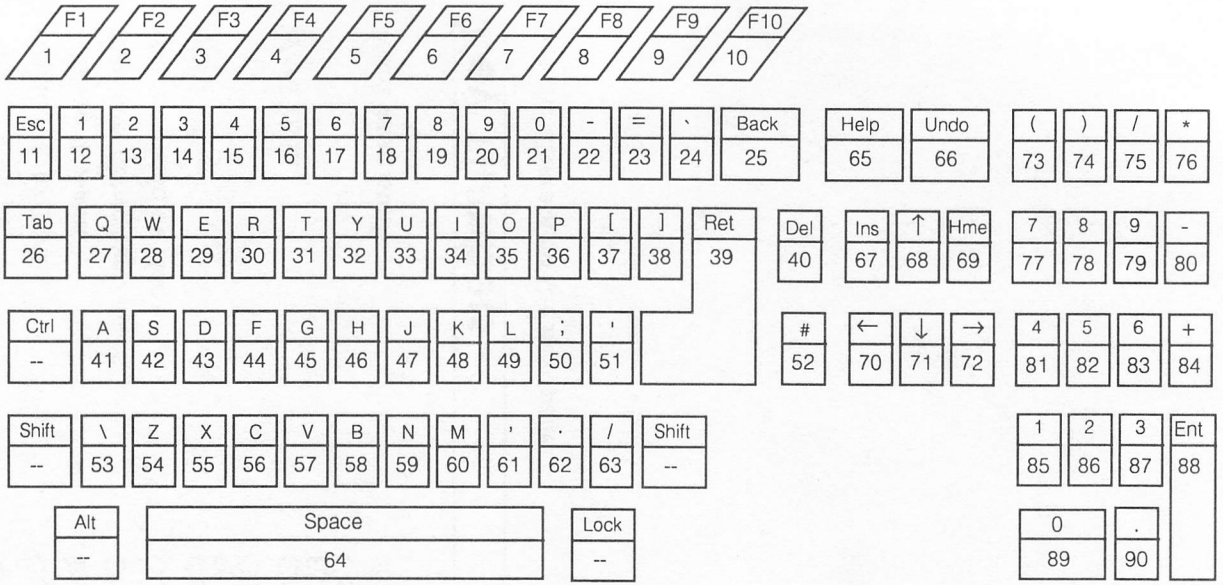
Goto next line	Shift-Return Shift-Enter
Goto next tab	Shift-tab
Goto page...	Control-D
Goto previous tab	Alt-Shift-tab
Goto start block	Alt-B
Goto top of file	Shift-Home Alt-T
Grow/shrink boxes, toggle	Control-N7
Insert character	Insert
Insert line	Shift-Insert
Insert mode	Alt-I
Inverse screen	Alt-Q
Launch parameters, set	Shift-Alt-O
Launch program	Shift-Alt-P
Left justify	Shift-Alt-L
Line length, set	Control-=
Line numbering, toggle	Control-;
Line, duplicate	Control-Insert
Line, move	Alt-Backspace
Load file	Alt-X
Macro record with echo	Control-Esc
Macro record without echo	Alt-Esc
Overwrite mode	Alt-O
Page down	Control-↓ F2 Control-C
Page length, set	Control-\
Page up	Control-↑ F1 Control-R
Paging factor, set	Alt-U
Print file	Control-P
Program parameters, set	Shift-Alt-T
Quit & save	Shift-Alt-N0 ... 3
Quit & save with backup	Control-N0 ... 3
Quit	Control-X

Reformat all	Shift-Alt-R
Reformat paragraph	Shift-Alt-Return
Reload this file	Control-U
Save	Alt-S
Save as	Alt-W
Save with backup	Control-S
Scroll left one column	Shift-Alt-N+
Scroll left one page	Shift-Alt-N6
Scroll right one column	Shift-Alt-N4
Scroll right one page	Shift-Alt-N5
Search again	Alt-L F7
Search	Control-L
Search/replace	Control-E
Settings, compile	Control-J
Settings, save	Alt-J
Sort lines	Shift-Alt-S
Source mode	Shift-Alt-Q
Stack windows	Control-,
Structure check	Shift-Alt-H
Swap line down	Alt-~
Swap line up	Control-~
Tab backward, delete	Control-Tab
Tab backward, limited	Alt-Tab
Tab forward, insert	Tab
Tab width, set	Alt-N
Undo	Undo
Undo, brief	Shift-Undo
Upper/lower case, toggle	Control-G
Window 1, close	Alt-N(
Window 1, to front	Control-N(
Window 1, zoom	Shift-Alt-N(
Window 2, close	Alt-N)
Window 2, to front	Control-N)
Window 2, zoom	Shift-Alt-N)

Window 3, close	Alt-N/
Window 3, to front	Control-N/
Window 3, zoom	Shift-Alt-N/
Window 4, close	Alt-N*
Window 4, to front	Control-N*
Window 4, zoom	Shift-Alt-N*
Windows above each other	Control-/
Windows side by side	Control-.
Word left	Control-← F5 Control-A
Word right	Control-→ F6 Control-F
Word wrap mode	Shift-Alt-W

Key Numbers

See the diagram on the next page.



Modifier	Offset
Control	0
Shift-Alt	90
Alt	180
Shift	270
Capslock	360
Normal	450

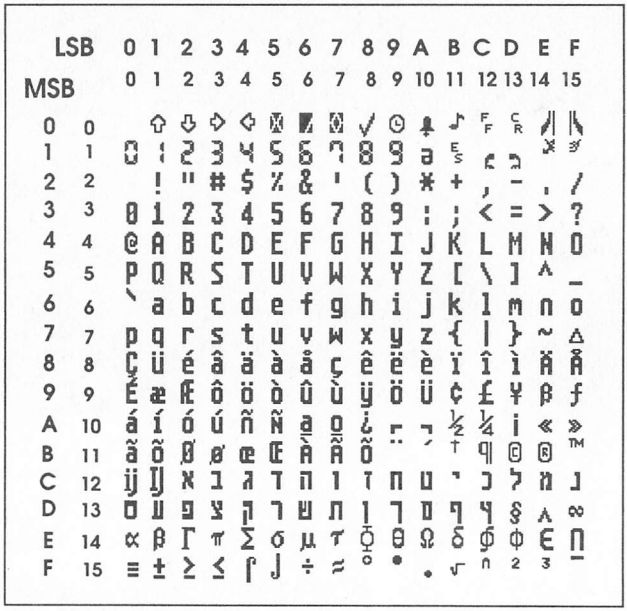
Key Number = Keytop number + offset

e.g. Shift-Z = 270+54 = 324
Delete = 450+40 = 490

Key Numbers

Appendix B
The ST ASCII Table

Here is the 8-bit ASCII representation of the ST's character set.



LSB		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
MSB		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	0		⇧	⇩	⇨	⇦	▩	◩	▩	✓	◷	♣	♪	FF	CR	⁄	⁄
1	1	0	1	2	3	4	5	6	7	8	9	a	ES	⁄	⁄	⁄	⁄
2	2		!	"	#	$	%	&	'	(	)	*	+	,	-	.	/
3	3	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
4	4	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	5	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
6	6	`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
7	7	p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	△
8	8	Ç	ü	é	â	ä	à	å	ç	ê	ë	è	ï	î	ì	Ä	Å
9	9	É	æ	Æ	ô	ö	ò	û	ù	ÿ	Ö	Ü	¢	£	¥	ß	ƒ
A	10	á	í	ó	ú	ñ	Ñ	ª	º	¿	⌐	¬	½	¼	¡	«	»
B	11	ã	õ	Ø	ø	œ	Œ	À	Ã	Õ	¨	´	†	¶	©	®	™
C	12	ij	IJ	א	ב	ג	ד	ה	ו	ז	ח	ט	י	כ	ל	מ	נ
D	13	ס	ע	פ	צ	ק	ר	ש	ת	ן	ך	ם	ף	ץ	§	^	∞
E	14	α	β	Γ	π	Σ	σ	µ	τ	Φ	Θ	Ω	δ	φ	φ	∈	∩
F	15	≡	±	≥	≤	⌠	⌡	÷	≈	°	•	.	√	ⁿ	²	³	¯

The most significant 4 bits of the ASCII representation are shown down the left side whereas the least significant 4 bits are across the top so that, for example:

4C (4*16 + 12 = 76 decimal) represents **L**

7B (7*16 + 11 = 123 decimal) represents {

Appendix C
Technical Support

So that we can maintain the quality of our technical support service we are detailing how to take best advantage of it. These guidelines will make it easier for us to help you, fix bugs as they get reported and save other users from having the same problem. Technical support is available in four ways:

Phone our technical support hour is normally between 3pm and 4pm, though non-European customers' calls will be accepted at other times.

Post if sending a disk, *please* put your name & address on it.

BIX™ our username is (not surprisingly) *hisoft*. Would UK customers please use CIX or more old fashioned methods; it's cheaper for everyone.

CIX™ our username is (still not surprisingly) *hisoft*.

For bug reports, please always quote the program, computer and the version number of the program (the one displayed by the About box) and the serial number found on your master disk.

If you think you have found a bug, try and create a small program that reproduces the problem. It is always easier for us to answer your questions if you send us a letter and, if the problem is with a particular source file, enclose a copy on disk (which we will return).

Upgrades

As with all our products, Tempus is undergoing continual development and, periodically, new versions become available. We make a small charge for upgrades, though if extensive additional documentation is supplied the charge may be higher. All users who return their registration cards will be notified of major upgrades.

Suggestions

We welcome any comments or suggestions about our programs and, to ensure we remember them, they should be made in writing.

Notes

Index

68020 108

Alt 10
ASCII 19, 54
ASCII Table 115
Auto repeat 68
Auto saving 88

Backup 2, 40, 80
Basic parameters 9, 97
Blitter 108
Block 23, 43
  copy 44
  delete 45, 59
  move 44
  print 45
  save 45
Block markers 43
Bookmarks **28**
  jump to 29
  set 29

Calculator 60
Caps Lock 11
Character set 17
Command line 77
Comparing files 56
Control 10
Conventions 6
Converting characters 54
Cross-reference **51**
Current text 7
Current window 7
Cursor commands 25
Cursor positioning 23

Data structures 107
Deleting files 41
Dialog boxes 8

Editing commands 19
End-of-line marker 87, 107

File
  reloading 39
File format 107
File selector **33**
Filenames 8
Fonts 65
Full justification 14, 87
Function keys **93**

Grow/Shrink boxes 85

i_value **7**, 99
Icons 69
Indent 16
Insert 15
Insert Text 39
Internal errors 9
Inverse fonts 65

Key numbers **113**, 98, 100
Keyboard 10
Keyboard layout 89
Keyboard settings 100
Keyboard shortcuts 8, 109
KEYSYS.INS 5, 9, 98, 99

Launch 78, 79
Left justification 14
Line
  delete 59
Line length 83
  maximum 17
Line numbering 105
Load 39
Loading files 38
Low resolution 2

Lowercase 21

Macros 89
  example 91
  executing 91
  recording 90
Memory management 9
Memory requirements 86
Mouse 17, 28
Mouse buttons 71
  left mouse button 67
  right mouse button 70

Overwrite 15, 41

Page length 83
Paragraph 58
Print commands 103
  aborting printing 104
  print block 104
  print text 104
  printing to disk 104
PRINT.INS 5, 9, 98, 99
Printer settings 102

Quick access 29
Quit **79**
  quit and save 80
  quit and verify 79

Reformat 57
RPN 60

Save 40, 79
Save as 40
Save aettings 96
Saving files 40
Screen saving 88
Scroll 26
Scroll bar 68
Scroll bar lag 88
Scroll mode 16
Search 49
Search and replace **47**

Settings 36, 83, 98
  basic parameters 97
  compiling 99
  error messages 99
  file selector 97
  source format 98
  text window 97
  the different groups of 97
Shift 10
Shift-Alt 10
Sorting 53
Source mode 13
Structure 60
Suggestions 117
System font 65
System settings 102

Tab 20, 21, 27, 63
Tab width 85
Technical support 2, 117
Tempus' parameters 86
Time display 85

Undo 58
Upgrades 117
Upper case 48
Uppercase 21

Wildcards 49
Window 67, 69, 70, 71, **73**
  close text window 74
  to the front 73
  zooming windows 74
Word wrap 13, 14, 56, 57

High Quality Software

Tempus 2 for the Atari ST

HiSoft
High Quality Software

ISBN
0 948517 17 4

CCD
Creative Computer Design